Be confident, you are using a CLEAN IMPLANT!

TRUSTED QUALITY Award 2017-2023
From the CLEAN IMPLANT FOUNDATION

MegaGen's mission is to manufacture the highest quality implants, and this Trusted Quality Award is the confirmation of our commitment. For more information about the Clean Implant Foundation, please visit www.cleanimplant.com

ANYRIDGE®
by MEGAGEN

Key Advantages

Excellent initial stability even at the compromised bone density

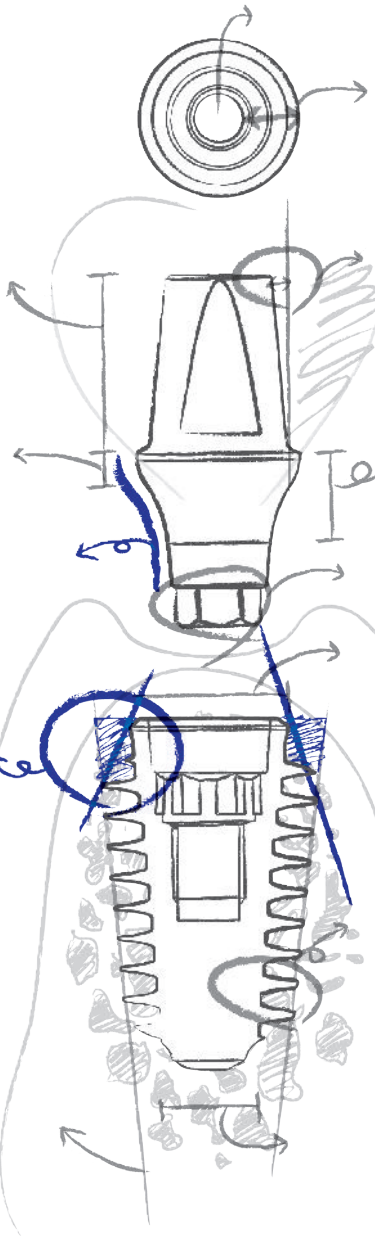
No screw loosening guaranteed!

Unique and valuable ISQ pattern; essential for predictable immediate or early loading.

Product coordinator: Hyun wook An, rnd_dir@imegagen.com

Characteristics & Advantages

I. Design Concept



Small yet strong abutment screw
Diameter 1.8mm

Thicker abutment wall
More favorable for path adjustment

Various post height options
4.0, 5.5, 7.0, 9.0mm for convenience

Optimum post taper
- ✓ Different taper according to post diameter (8°, 10°, 12°, 14°)
- ✓ Larger diameter has more taper

Freedom of 1mm
1mm trimmable margin gives restorative flexibility without changing B-L dimension

Variety of cuff height options
2.0, 3.0, 4.0, 5.0mm

Biologic S-line
provides seamless natural-looking emergence profile

Single connection
Same abutment can be used on any size of fixture

Wider fixture possible with narrow ridge

Maximum preservation of cortical bone
Important for esthetics & long-term prognosis

KnifeThread®
Immediate high & sustained ISQ values for immediate loading
Sufficient space for angiogenesis & blood supply via inter-thread space

No cutting edge, but strong self-threading
- ✓ Sharp cutting flutes slice and widen bone gradually.
- ✓ No wobbling on cortical slope in anterior immediate placement case.

Taper design
Easy to place & guaranteed excellent initial stability

Narrow apical diameter
Larger fixture is placed via smaller osteotomy socket(less invasive surgery)
Important to preserve biology of marginal hard & soft tissues

AnyRidge Fixture Line Up

Same core diameter, but different thread depth

Core Diameter	Fixture Diameter									
	∅3.5	∅4.0	∅4.5	∅5.0	∅5.5	∅6.0	∅6.5	∅7.0	∅7.5	∅8.0
∅2.8										
Thread Depth	0.3									
∅3.3										
Thread Depth		0.35	0.6	0.85	1.1					
∅3.8										
Thread Depth			0.35	0.6	0.85					
∅4.0										
Thread Depth				0.45	0.7	0.95				
∅4.3										
Thread Depth				0.35	0.6	0.85				
∅4.8										
Thread Depth					0.35	0.6	0.85	1.1	1.35	1.6

II. Surgery

Excellent initial stability, even at compromised bone density.
AnyRidge® Fixture cuts bone smoothly and condenses it simultaneously.

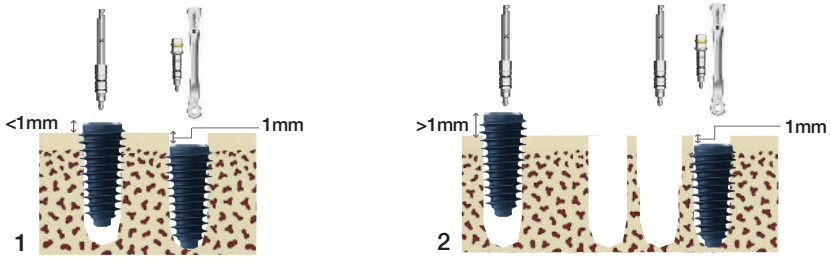
1. Fixture placement

- **Soft bone**

The super self-tapping threads have a single core diameter that facilitates minimal site preparation by utilizing a smaller osteotomy to place a wider fixture with special threads.

- **Hard bone**

AnyRidge® Fixture with its super self-tapping thread design is easier than other traditional implants at hard bone.
**Caution! : The osteotomy socket (drilling) size should almost reach the size of fixture to avoid getting stuck in the bone during placement.*



Easy way to avoid stuck in the bone during AnyRidge implant placement

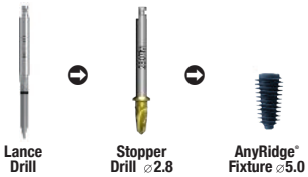
1. Due to extremely strong initial stability of AnyRidge fixture, it can be stuck in the middle during placement especially in mandibular hard bone. Please consider **'One millimeter Rule'** to avoid this in the best and easiest way. Clinician can customize the drilling sequence once he fully understand the concept and characteristics of AnyRidge system to get preferred initial stability. **'One millimeter Rule'** is simple; if an implant engine (40Ncm) stops leaving one millimeter above the crest, use ratchet wrench to screw it down to preferred position. We recommended to place implant platform 0.5~1.0mm under the crest.

2. If a fixture stucks in the middle leaving more than 1mm above the crest in hard mandibular bone, it is recommended to remove it using a wrench rather than trying to screw it down with excessive torque. Please use a cortical bone drill that is included in a surgical kit, the depth of cortical bone drilling can be adjusted according to the bone condition. Then, place the same fixture into the osteotomy socket.

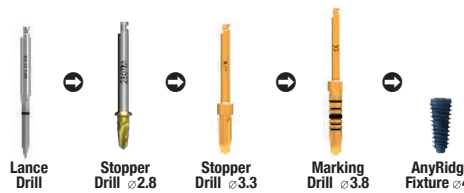
2. Customized drilling Sequence

- **AnyRidge® system has no fixed drilling protocol, just make your own protocol based on patient's bone quality to attain preferred initial stability or simply drill an osteotomy socket to given conditions and then decide the diameter of a fixture.**

Example 1) Ø5.0mm fixture can be placed 2.9mm osteotomy socket in D4 bone. Excellent initial stability can be attained



Example 2) In hard one, it is highly recommended to make a socket almost same diameter size as a fixture



- **Improved drill design has simplified drilling sequence, you can even harvest autogenous bone using these specially designed drills.**
  (Recommended speed : 50 RPM, 50 Ncm with saline solution irrigation)

- **The best way to get ideal initial stability with AnyRidge system is placing a fixture using a surgical engine, leaving one or two treads above the crest; then use ratchet wrench to place the platform at the desired position.**

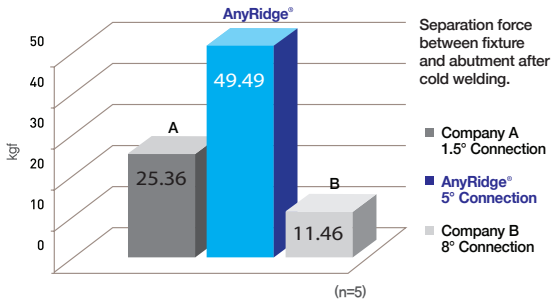
III. Prosthetics

Better esthetic outcomes from wide variety of prosthetic options!
Stop worrying about screw loosening!

1. No screw loosening, less biologic width!

• Magic Five (5° Internal connection)

Now you can be free from screw loosening with our unique connection (5 degree morse taper) which gives perfect hermetic sealing. Biologic width is minimized due to no micro gap, and crestal bone health is well maintained.



Performed Retention Test to evaluate the fixture-abutment retention force using Universal Testing Machine -R&D center in MegaGen Implant Co.,Ltd.(2009)-

2. Biologic S-line

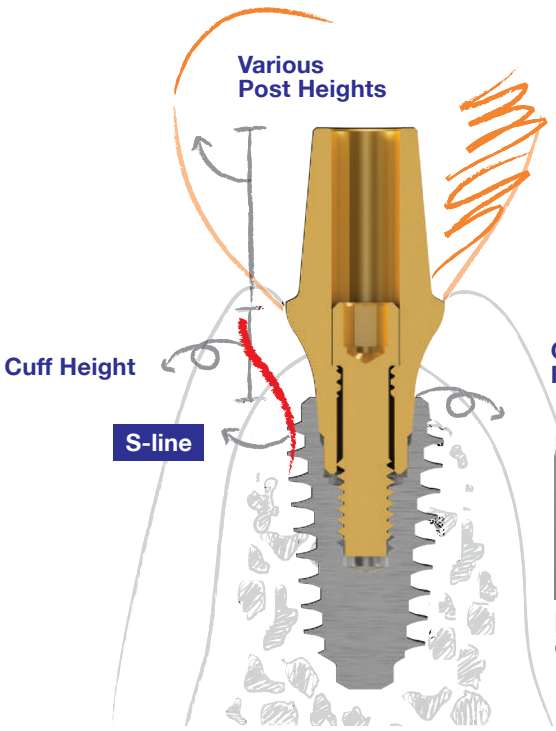
Helps to achieve beautiful, natural-looking esthetics.

3. Optimum hex height

Feel AnyRidge connection. It starts with impression taking and lasts until final restoration.

4. All indications, various abutment options

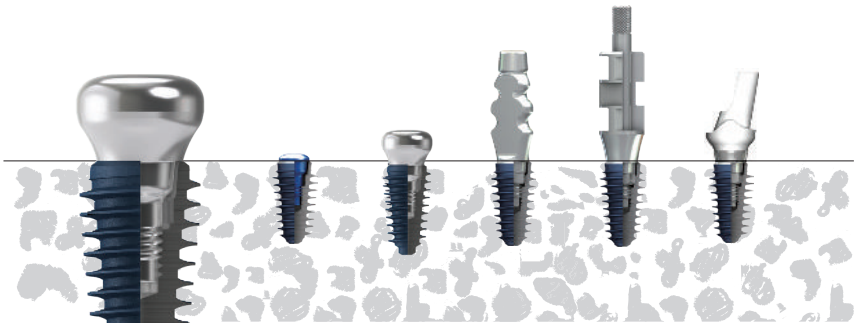
Every case, every shape, every size. Everything was considered to satisfy every need.



[SEM Image] Magic Five Connection : 5° Morse Taper

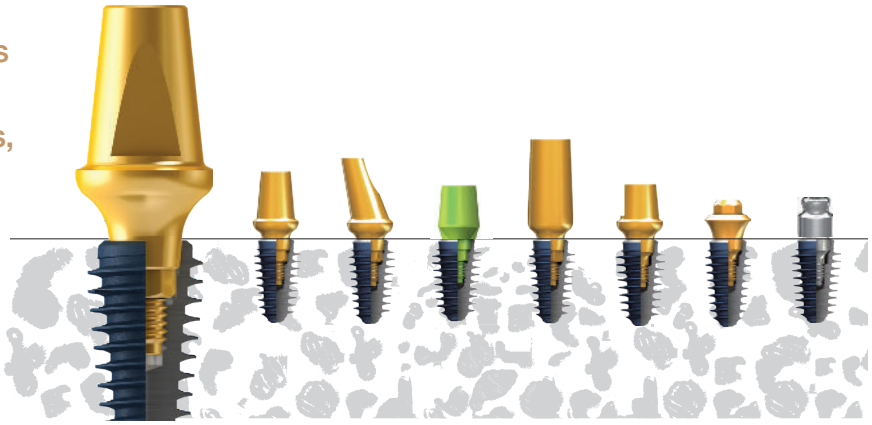
▸▸ Two different connections between a fixture & a component

1. All transitional and temporary components have 'Ledges' on the bottom



- Cover Screws, Healing Abutments, Impression Coping (transfer and pick-up type), Temporary Cylinders have ledges on the bottom which prevent from cold welding with a fixture.
- Hand Drivers(1.2 Hex) or Impression Drivers can be used easily to screw these components in and out.

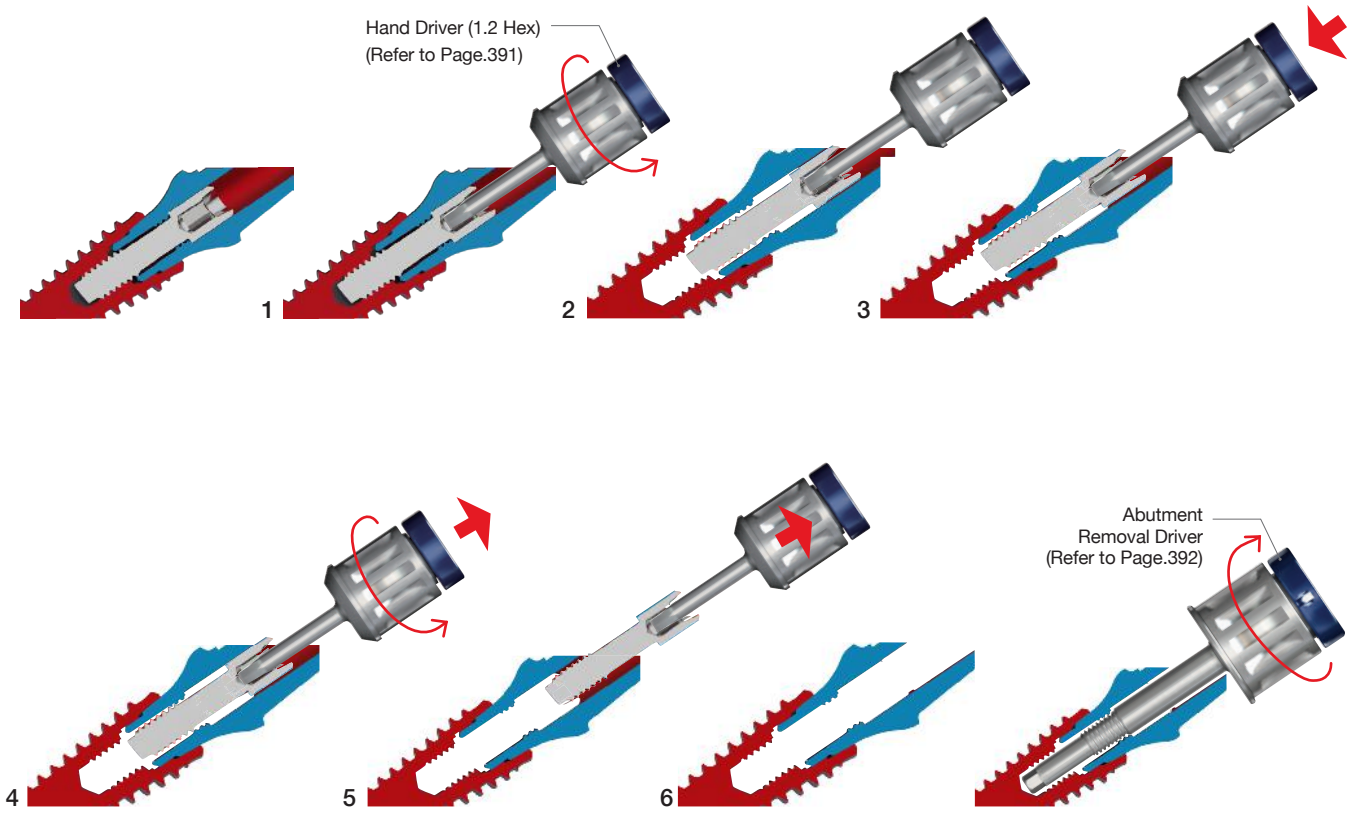
2. All permanent abutments will make strong connections with fixtures, even with finger force!



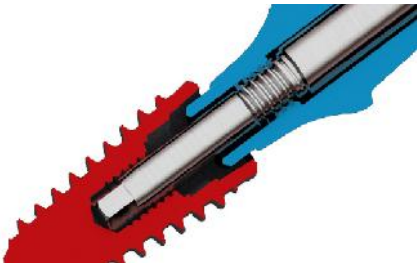
- 25~35Ncm is recommended to connect a permanent abutment into a fixture.
- A fixed abutment cannot be removed with finger force even after complete removal of Abutment Screw because of perfect cold welding. To remove a permanent abutment, Abutment Removal Driver should be used.

How to remove Permanent Abutment from Fixture?

Due to extremely strong connection force, you don't have to worry about screw loosening. Please use our special 'removal driver' when you want to remove an abutment from a fixture.



1. Use a Hand Driver(1.2 Hex) to unscrew Abutment Screw.
2. Continue to turn counter-clockwisely until you feel a click of disengagement.
3. Push down Hand Driver once again to catch and fix Abutment Screw.
4. Lift up Hand Driver lightly and continue to turn counter-clockwisely until Abutment Screw engages with the inner screw of Abutment.
5. Remove Abutment Screw completely from the abutment
6. Insert an 'Abutment Removal Driver' and continue to turn clockwise until the abutment comes out of fixture. You can feel some resistance during screw-down of the Abutment Removal Driver, but don't worry, simple exert is needed disconnect the abutment from the fixture.

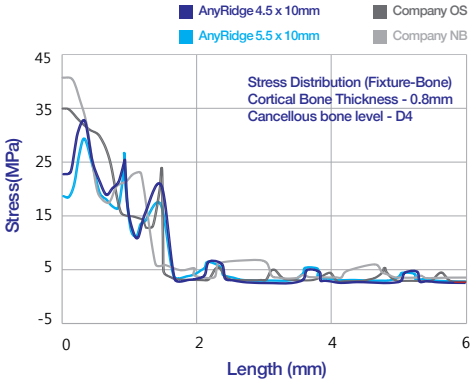


IV. Maintenance

Unique and sturdy design provides long-term stability!

1. Higher cortical bone preservation is guaranteed

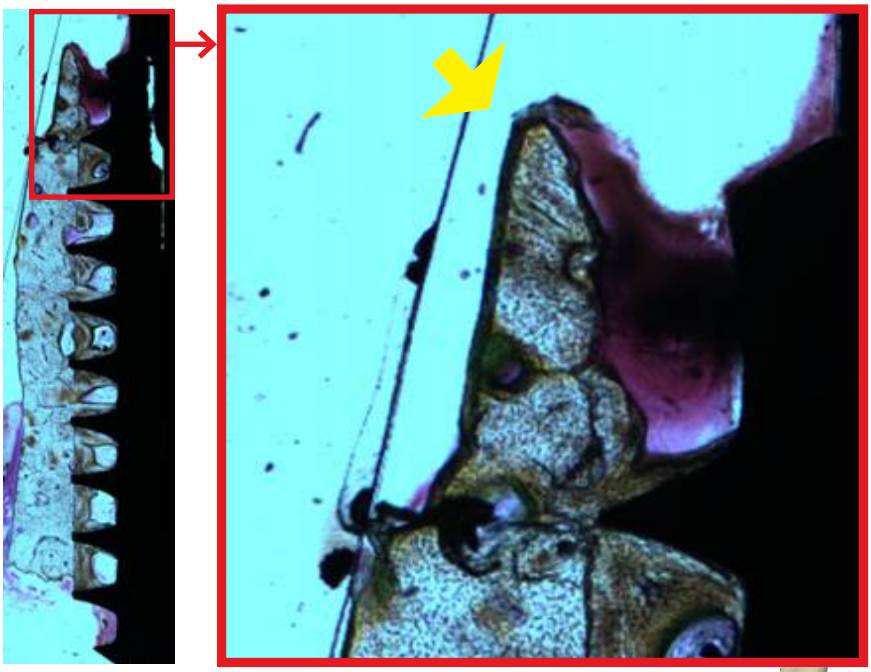
AnyRidge does not depend on cortical bone for initial stability; decreased stress on cortical bone helps to prevent bone resorption after implantation.



- **More cortical bone**
  = More soft tissue volume
  = Beautiful gingival line

  Advanced coronal design allows maximum cortical bone preservation around implants. Beyond osseointegration, AnyRidge can assure beautiful gingival line by preserving and maintaining more cortical bone.

Performed Finite element analysis to evaluate the fixture-bone stress using ABAQUS 6.8 -R&D center in MegaGen Implant Co.,Ltd.(2009)-

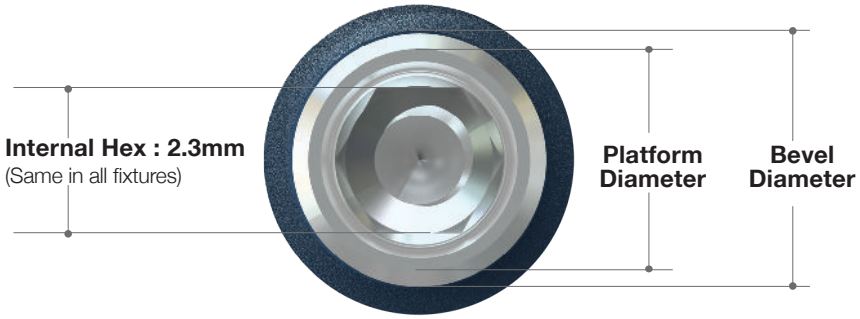


- **A Human Biopsy** (2.5 yrs after placement)

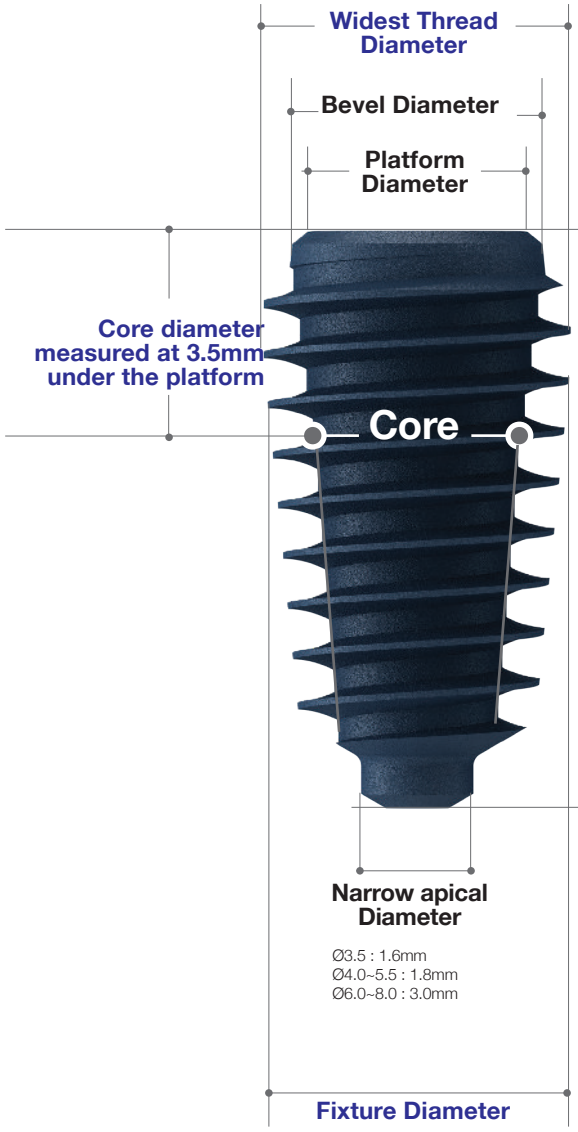
The sharp and high alveolar crest (yellow arrow) could be maintained due to biology driven implant design. With this maintenance of alveolar bone, the peri-implant marginal gingiva showed almost no recession during 2.5 years of follow-up, even in the case of limited ridge width.

Fixture Product & Packaging

I. Fixture Dimension



Core (mm)	Platform (mm)	Bevel (mm)
Ø3.3	3.5	3.8
		4.0
Ø3.8	4.0	4.5
Ø4.0	4.25	4.75
Ø4.3	4.5	5.0
Ø4.8	5.0	5.5



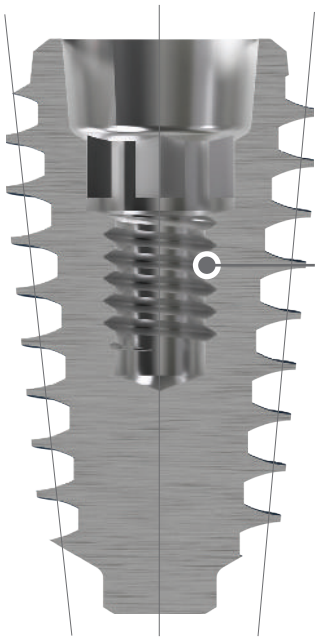
Widest Thread Diameter is
0.5mm Wider than Fixture Size at 3.5mm
0.4mm Wider than Fixture Size at 4.0~8.0mm

*For example
Ø3.5 = Fixture Diameter + 0.5mm
Ø4.0~Ø8.0 = Fixture Diameter + 0.4mm

*Actual length of fixture
Core Ø3.3~4.3 fixture : 0.8mm shorter than the written length
Core Ø4.8 fixture : 0.6mm shorter than the written length

Important concept!

It has been proven that 0.5~1.0mm subcrestal placement shows better crestal bone response.
With AnyRigde system, a fixture goes down to the ideal position without further drilling avoiding damage to important anatomic structures.



Female screw
1.8mm Diameter X
0.35mm Pitch

[SEM Image]

II. Fixture Size

Small Ø3.5

- Cover Screw included.
- Availability of 7mm product is subject to local approval.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
3.5	2.8	8.5	FANIHX3508C
		10	FANIHX3510C
		11.5	FANIHX3511C
		13	FANIHX3513C
		15	FANIHX3515C

Regular Ø4.0

- Cover Screw included.
- Availability of 7mm product is subject to local approval.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
4.0	3.3	8.5	FANIHX4008C
		10	FANIHX4010C
		11.5	FANIHX4011C
		13	FANIHX4013C
		15	FANIHX4015C

Regular Ø4.5

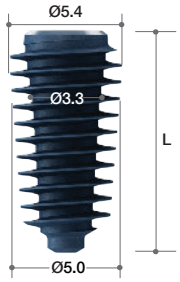
- Cover Screw included.
- Availability of 7mm product is subject to local approval.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
4.5	3.3	8.5	FANIHX4508C
		10	FANIHX4510C
		11.5	FANIHX4511C
		13	FANIHX4513C
		15	FANIHX4515C
		8.5	AR384508C
		10	AR384510C
		11.5	AR384511C
		13	AR384513C
		15	AR384515C

Fixture Size (Continued)

Wide Ø5.0

- Cover Screw included.



Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
5.0	3.3	7	FANIHX5007C
		8.5	FANIHX5008C
		10	FANIHX5010C
		11.5	FANIHX5011C
		13	FANIHX5013C
		15	FANIHX5015C
	3.8	7	AR385007C
		8.5	AR385008C
		10	AR385010C
		11.5	AR385011C
		13	AR385013C
		15	AR385015C

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
5.0	4.0	7	FANIHX5007SC
		8.5	FANIHX5008SC
		10	FANIHX5010SC
		11.5	FANIHX5011SC
		13	FANIHX5013SC
		15	FANIHX5015SC
	4.3	7	AR435007C
		8.5	AR435008C
		10	AR435010C
		11.5	AR435011C
		13	AR435013C
		15	AR435015C

Wide Ø5.5

- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
5.5	3.3	7	FANIHX5507C
		8.5	FANIHX5508C
		10	FANIHX5510C
		11.5	FANIHX5511C
		13	FANIHX5513C
		15	FANIHX5515C
	3.8	7	AR385507C
		8.5	AR385508C
		10	AR385510C
		11.5	AR385511C
		13	AR385513C
		15	AR385515C
	4.0	7	FANIHX5507SC
		8.5	FANIHX5508SC
		10	FANIHX5510SC
		11.5	FANIHX5511SC
		13	FANIHX5513SC
		15	FANIHX5515SC

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
5.5	4.3	7	AR435507C
		8.5	AR435508C
		10	AR435510C
		11.5	AR435511C
		13	AR435513C
		15	AR435515C
	4.8	7	AR485507C
		8.5	AR485508C
		10	AR485510C
		11.5	AR485511C
		13	AR485513C
		15	AR485515C

➲ Fixture Size

Super Wide Ø6.0

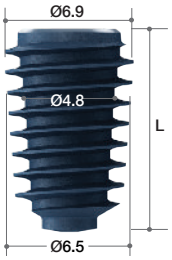
- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
6.0	4.0	7	AR406007C
		8.5	AR406008C
		10	AR406010C
		11.5	AR406011C
		13	AR406013C
	4.3	7	AR436007C
		8.5	AR436008C
		10	AR436010C
		11.5	AR436011C
		13	AR436013C
	4.8	7	FALIHX6007C
		8.5	FALIHX6008C
		10	FALIHX6010C
		11.5	FALIHX6011C
		13	FALIHX6013C

Super Wide Ø6.5

- Cover Screw included.

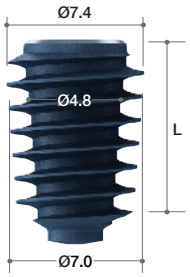
Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
6.5	4.8	7	FALIHX6507C
		8.5	FALIHX6508C
		10	FALIHX6510C
		11.5	FALIHX6511C
		13	FALIHX6513C



Super Wide Ø7.0

- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
7.0	4.8	7	FALIHX7007C
		8.5	FALIHX7008C
		10	FALIHX7010C
		11.5	FALIHX7011C
		13	FALIHX7013C



Super Wide Ø7.5

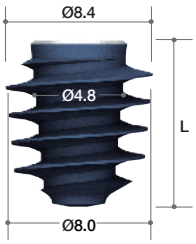
- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
7.5	4.8	7	FALIHX7507C
		8.5	FALIHX7508C
		10	FALIHX7510C
		11.5	FALIHX7511C
		13	FALIHX7513C

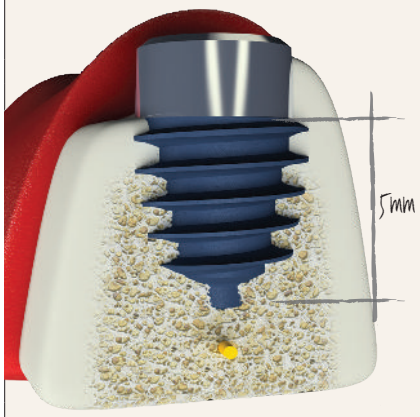
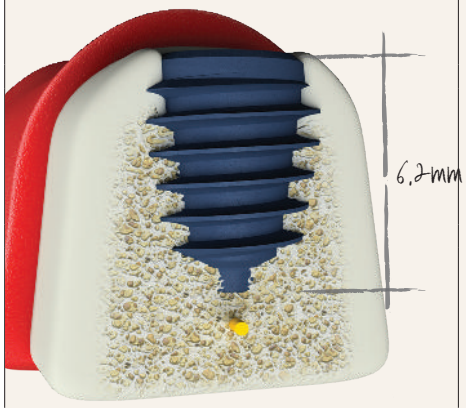
Super Wide Ø8.0

- Cover Screw included.

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
8.0	4.8	7	FALIHX8007C
		8.5	FALIHX8008C
		10	FALIHX8010C
		11.5	FALIHX8011C
		13	FALIHX8013C

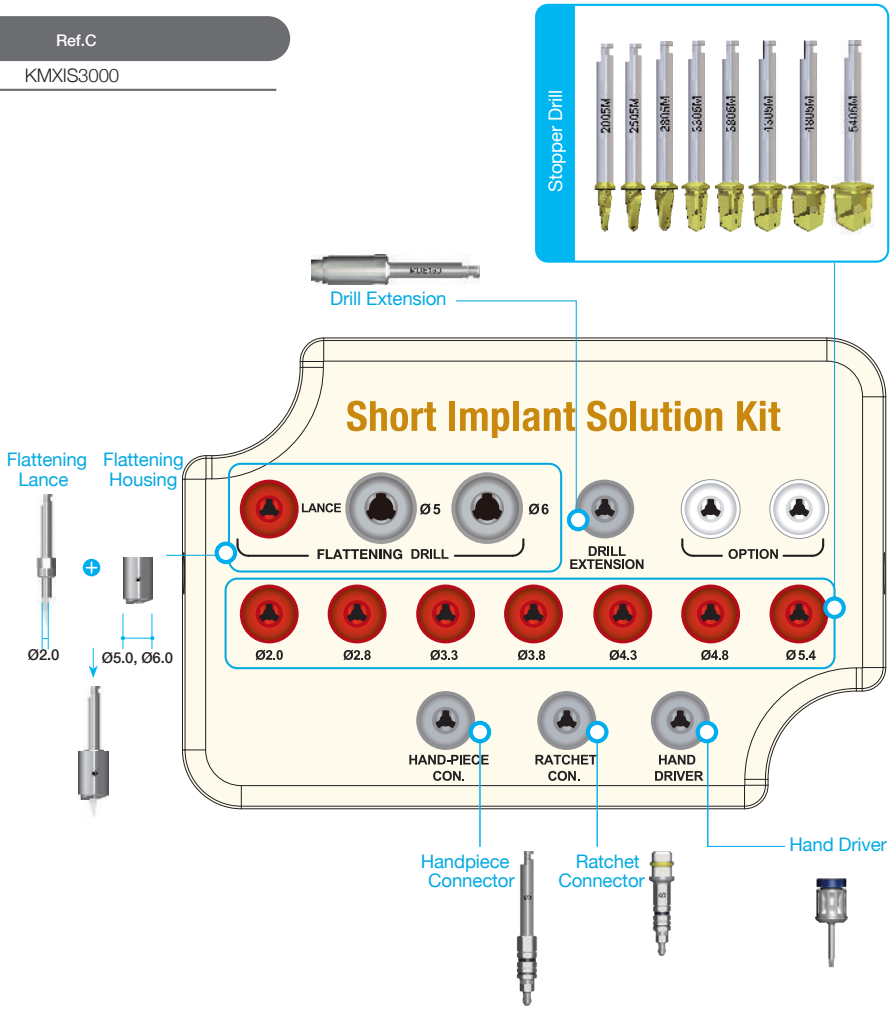


For special use in case of limited vertical dimension (minimum bone depth: 5 / 6mm)

Core Diameter		Fixture Diameter				
		∅3.5	∅4.0	∅4.5	∅5.0	∅5.5
5mm 	AnyRidge					
		Core 3.3				
						
		Core 3.8				
						
		Core 4.3				
						
		Core 4.8				
	AnyOne Refer to page.230					
		Core 3.5				
						
		Core 4.0				
6.2mm 	AnyRidge					
		Core 3.3				
						
		Core 3.8				
						
		Core 4.0				
						
		Core 4.3				
						
		Core 4.8				

Surgical Kit for Short Implant Solution

Ref.C
KMXIS3000



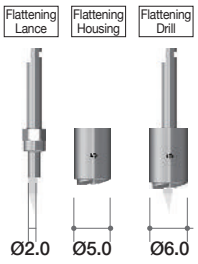
Important!

Flattening Drill

- Flattens irregular bone for accurate stopper drilling
- Designed to engage with flattening lance & housing. 2 kinds of housing to match diameters of different final drills (Ø5.0 & Ø6.0)
- Ø5.0 = Stopper Drill Ø2.0 ~ Ø4.3
- Ø6.0 = Stopper Drill Ø4.8 ~ Ø5.4
- Housing boundary guides drilling position of fixture

Diameter	Length(mm)	Ref.C
Ø5.0 / Ø2.0	3.5	FD5020
Ø6.0 / Ø2.0		*FD6020

(*) Separate sales item

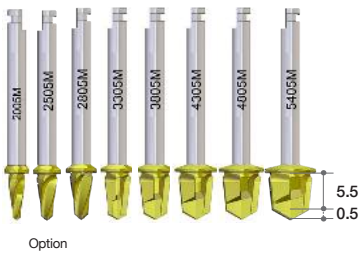


Stopper Drill

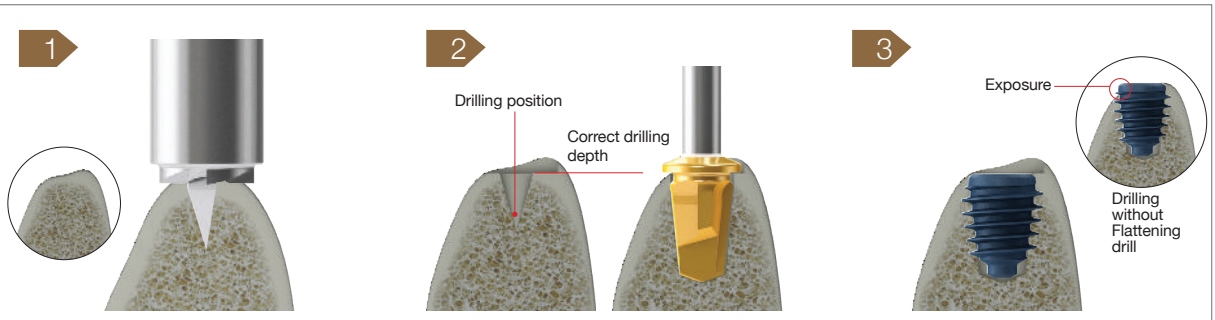
- TiN coated for enhanced corrosion & abrasion resistance

Profile Diameter	Length (mm)	Ref.C
Ø2.0	6.0	MS2005M
Ø2.5		*MS2505M
Ø2.8		MS2805M
Ø3.3		MS3305M
Ø3.8		MS3805M
Ø4.3		MS4305M
Ø4.8		MS4805M
Ø5.4		MS5405M

(*) Separate sales item

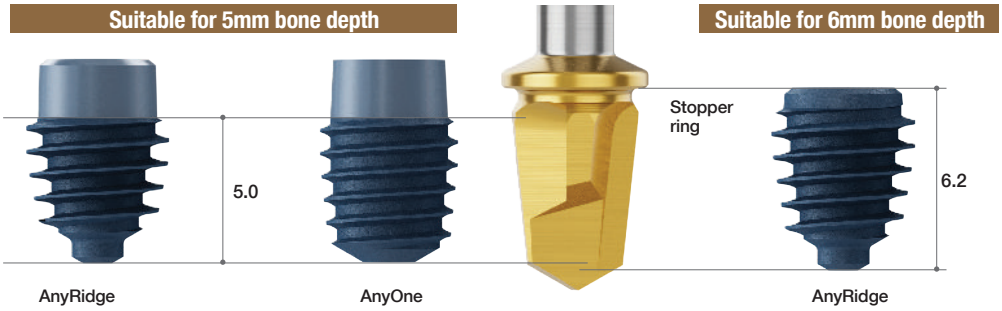


Drilling Protocol

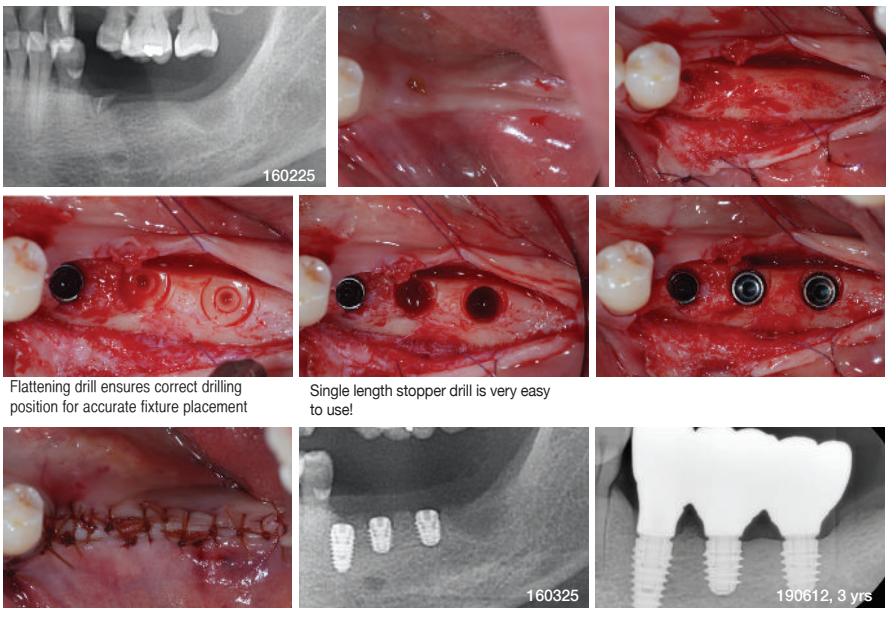


- Flattening drill ensures correct drilling depth & position for accurate fixture placement (If diameter of final drill is Ø2.0~Ø4.3, use Ø5.0 housing / if Ø4.8 or Ø5.4, use Ø6 housing)
- Drilling sequence should consider fixture size & bone density
- Place fixture using handpiece & ratchet connector

Drilling depth guide



Clinical Case



Flattening drill ensures correct drilling position for accurate fixture placement

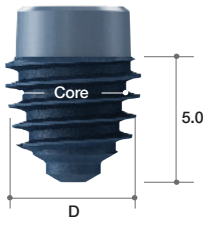
Single length stopper drill is very easy to use!

➲ Fixture Size

Short Implant

- Cover Screw included

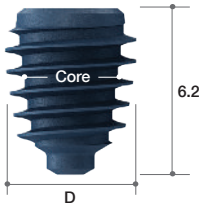
Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
Ø3.5	3.3	5	AR333505C
Ø4.0	3.3		AR334005C
Ø4.5	3.3		AR334505C
	3.8		AR384505C
Ø5.0	3.3		AR335005C
	3.8		AR385005C
	4.3		AR435005C
Ø5.5	3.3		AR335505C
	3.8		AR385505C
	4.3		AR435505C
	4.8		AR485505C



Short Implant

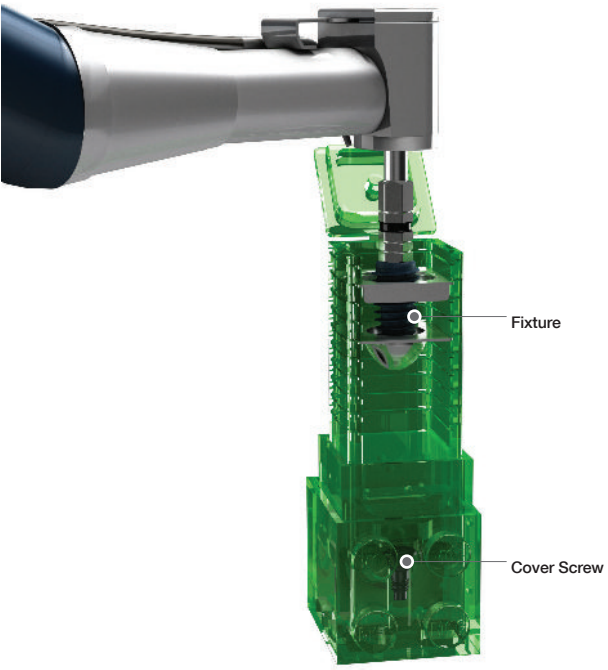
- Cover Screw included

Fixture Diameter (mm)	Core (mm)	Length (mm)	Ref.C
Ø5.0	3.3	6.2	FANIHX5007C
	3.8		AR385007C
	4.0		FANIHX5007SC
	4.3		AR435007C
Ø5.5	3.3		FANIHX5507C
	3.8		AR385507C
			FANIHX5507SC
	4.3		AR435507C
	4.8		AR485507C

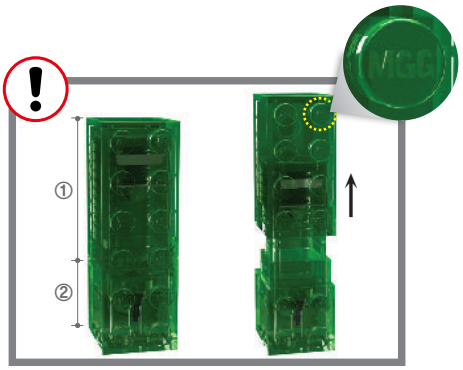


III. Packaging

- Ampule



Peel off cover & remove ampule



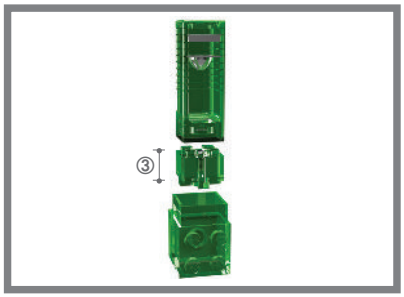
Separate top① & bottom②, as shown, to reveal inner ampule with fixture

Flip open top to reveal fixture

Connect handpiece to fixture

Make sure fixture is fully connected, then remove from ampule

Place fixture according to drilling sequence



Separate fixture ampule from bottom, as shown, to reveal cover screw holder③

Use hand driver to pick up cover screw

Tighten cover screw to fixture

MegaGen ampule! Re-usable as building block *after cleaning and sterilization! less plastic waste!

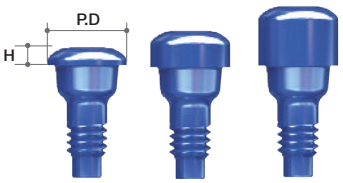
Cover Screw & Healing Abutment

Cover Screw

* Included in the fixture package.

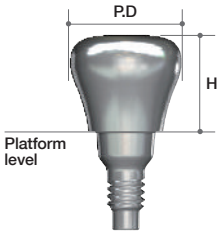
- Use with a Hand Driver(1.2 Hex).
- Used for submerged type surgery.
- Protects the inner structure of a fixture.
- Different heights can be chosen according to the position of fixture below the crest.
- 1.6mm and 2.6mm height of Cover Screw can be purchased separately.
- Recommend torque : by hand (5 - 8Ncm)

Profile Diameter	Height (mm)	Ref.C
Ø3.5	0.8	AANCSF3508
	1.6	AANCSF3516
	2.6	AANCSF3526
Ø5.0	0.5	AANCSF5005
Ø6.0	0.5	AANCSF6005



Healing Abutment

- Use with a Hand Driver(1.2 Hex).
- Used for non-submerged type surgery or for two stage surgery.
- Choose appropriate diameter and height of Healing Abutment according to situation.
- Helps to form suitable emergence profile during period of gingival healing.
- Recommend torque : by hand (5 - 8Ncm)



Profile Diameter	Height (mm)	Ref.C
Ø4.0	3	AANHAF0403
	4	AANHAF0404
	5	AANHAF0405
	6	AANHAF0406
	7	AANHAF0407
	8	AANHAF0408
	9	AANHAF0409
Ø5.0	3	AANHAF0503
	4	AANHAF0504
	5	AANHAF0505
	6	AANHAF0506
	7	AANHAF0507
	8	AANHAF0508
	9	AANHAF0509
Ø6.0	3	AANHAF0603
	4	AANHAF0604
	5	AANHAF0605
	6	AANHAF0606
	7	AANHAF0607
	8	AANHAF0608
	9	AANHAF0609

Profile Diameter	Height (mm)	Ref.C
Ø7.0	3	AANHAF0703
	4	AANHAF0704
	5	AANHAF0705
	6	AANHAF0706
	7	AANHAF0707
	8	AANHAF0708
	9	AANHAF0709
Ø8.0	3	AANHAF0803
	4	AANHAF0804
	5	AANHAF0805
	6	AANHAF0806
	7	AANHAF0807
	8	AANHAF0808
	9	AANHAF0809
Ø10.0	3	AANHAF1003
	4	AANHAF1004
	5	AANHAF1005
	6	AANHAF1006
	7	AANHAF1007
	8	AANHAF1008
	9	AANHAF1009

Healing Abutment

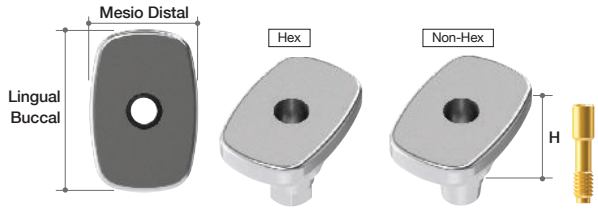
(Anatomic type)

- Use with a Hand Driver(1.2 Hex).
- Abutment Screw inclued.H=4 ARHAS1804/ H=5 ARHAS1805/ H=7 ARHAS1807
- Used for non-submerged type surgery or for two stage surgery.
- Choose appropriate diameter and height of Healing Abutment according to situation.
- Helps to form suitable emergence profile during period of gingival healing.
- Recommend torque : by hand (5 - 8Ncm)

Type	MD (mm)	LL (mm)	Height (mm)	Connection	Ref.C
Incisor	4.0	5.0	4	Hex	ARHI40504T
			5		ARHI40505T
			7		ARHI40507T
	4.5	4.5	4		ARHI45454T
			5		ARHI45455T
			7		ARHI45457T
	6.0	5.0	4		ARHI60504T
			5		ARHI60505T
			7		ARHI60507T
	7.0	6.0	4		ARHI70604T
			5		ARHI70605T
			7		ARHI70607T
	4.0	5.0	4	Non-Hex	ARHI40504NT
			5		ARHI40505NT
			7		ARHI40507NT
	4.5	4.5	4		ARHI45454NT
			5		ARHI45455NT
			7		ARHI45457NT
	6.0	5.0	4		ARHI60504NT
			5		ARHI60505NT
			7		ARHI60507NT
	7.0	6.0	4		ARHI70604NT
			5		ARHI70605NT
			7		ARHI70607NT

Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Canine	5.0	6.5	4	Hex	ARHC50654T
			5		ARHC50655T
			7		ARHC50657T
	5.0	6.5	4	Non-Hex	ARHC50654NT
			5		ARHC50655NT
			7		ARHC50657NT

Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Pre-Molar	4.5	6.0	4	Hex	ARHM45604T
			5		ARHM45605T
			7		ARHM45607T
	5.0	7.0	4		ARHM50704T
			5		ARHM50705T
			7		ARHM50707T
	4.5	6.0	4	Non-Hex	ARHM45604NT
			5		ARHM45605NT
			7		ARHM45607NT
	5.0	7.0	4		ARHM50704NT
			5		ARHM50705NT
			7		ARHM50707NT

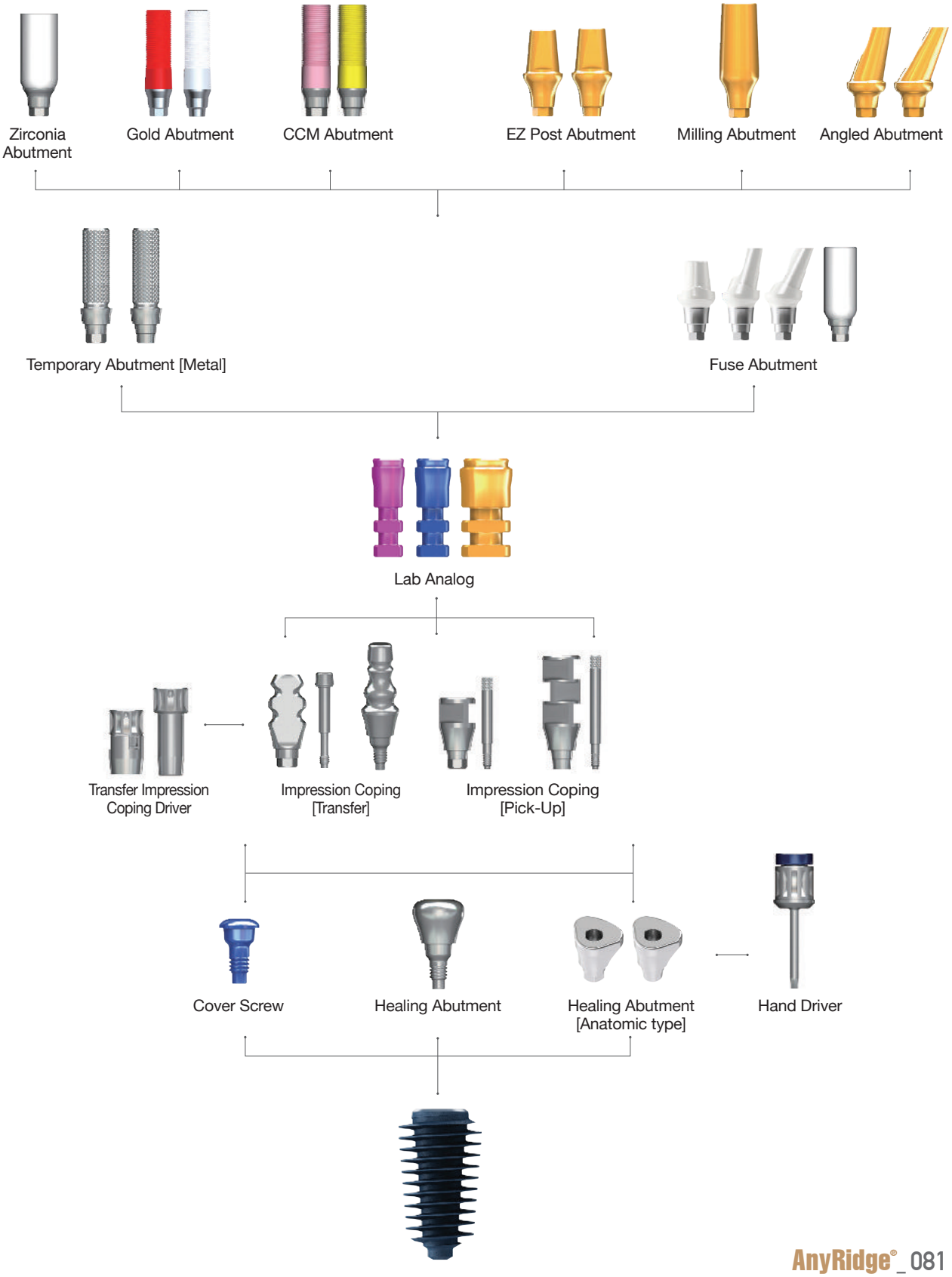


Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Molar	6.0	7.0	4	Hex	ARHM60704T
			5		ARHM60705T
			7		ARHM60707T
	6.0	8.0	4		ARHM60804T
			5		ARHM60805T
			7		ARHM60807T
	6.0	9.0	4		ARHM60904T
			5		ARHM60905T
			7		ARHM60907T
	7.0	8.0	4		ARHM70804T
			5		ARHM70805T
			7		ARHM70807T
	7.0	9.0	4		ARHM70904T
			5		ARHM70905T
			7		ARHM70907T
	7.0	10.0	4		ARHM70104T
			5		ARHM70105T
			7		ARHM70107T
	8.0	9.0	4		ARHM80904T
			5		ARHM80905T
			7		ARHM80907T
	8.0	10.0	4		ARHM80104T
			5		ARHM80105T
			7		ARHM80107T
	6.0	7.0	4	Non-Hex	ARHM60704NT
			5		ARHM60705NT
			7		ARHM60707NT
	6.0	8.0	4		ARHM60804NT
			5		ARHM60805NT
			7		ARHM60807NT
	6.0	9.0	4		ARHM60904NT
			5		ARHM60905NT
			7		ARHM60907NT
	7.0	8.0	4		ARHM70804NT
			5		ARHM70805NT
			7		ARHM70807NT
	7.0	9.0	4		ARHM70904NT
			5		ARHM70905NT
			7		ARHM70907NT
	7.0	10.0	4		ARHM70104NT
			5		ARHM70105NT
			7		ARHM70107NT
	8.0	9.0	4		ARHM80904NT
			5		ARHM80905NT
			7		ARHM80907NT
	8.0	10.0	4		ARHM80104NT
			5		ARHM80105NT
			7		ARHM80107NT

Type	MD (mm)	LB (mm)	Height (mm)	Connection	Ref.C
Special	4.5	6.0	4	Hex	ARHS45604T
			5		ARHS45605T
			7		ARHS45607T
	5.0	6.5	4		ARHS50654T
			5		ARHS50655T
			7		ARHS50657T
	5.0	7.0	4		ARHS50704T
			5		ARHS50705T
			7		ARHS50707T
	6.0	7.0	4		ARHS60704T
			5		ARHS60705T
			7		ARHS60707T
	6.0	8.0	4		ARHS60804T
			5		ARHS60805T
			7		ARHS60807T
	6.0	9.0	4		ARHS60904T
			5		ARHS60905T
			7		ARHS60907T
	7.0	8.0	4		ARHS70804T
			5		ARHS70805T
			7		ARHS70807T
	7.0	9.0	4		ARHS70904T
			5		ARHS70905T
			7		ARHS70907T
	7.0	10.0	4		ARHS70104T
			5		ARHS70105T
			7		ARHS70107T
	8.0	9.0	4		ARHS80904T
			5		ARHS80905T
			7		ARHS80907T
	8.0	10.0	4		ARHS80104T
			5		ARHS80105T
			7		ARHS80107T
	4.5	6.0	4	Non-Hex	ARHS45604NT
			5		ARHS45605NT
			7		ARHS45607NT
	5.0	6.5	4		ARHS50654NT
			5		ARHS50655NT
			7		ARHS50657NT
	5.0	7.0	4		ARHS50704NT
			5		ARHS50705NT
			7		ARHS50707NT
	6.0	7.0	4		ARHS60704NT
			5		ARHS60705NT
			7		ARHS60707NT
	6.0	8.0	4		ARHS60804NT
			5		ARHS60805NT
			7		ARHS60807NT
	6.0	9.0	4		ARHS60904NT
			5		ARHS60905NT
			7		ARHS60907NT
	7.0	8.0	4		ARHS70804NT
			5		ARHS70805NT
			7		ARHS70807NT
	7.0	9.0	4		ARHS70904NT
			5		ARHS70905NT
			7		ARHS70907NT
	7.0	10.0	4		ARHS70104NT
			5		ARHS70105NT
			7		ARHS70107NT
	8.0	9.0	4		ARHS80904NT
			5		ARHS80905NT
			7		ARHS80907NT
	8.0	10.0	4		ARHS80104NT
			5		ARHS80105NT
			7		ARHS80107NT

Abutment & Prosthetic Options

I. Fixture Level Prosthesis



➲ Impression Copings

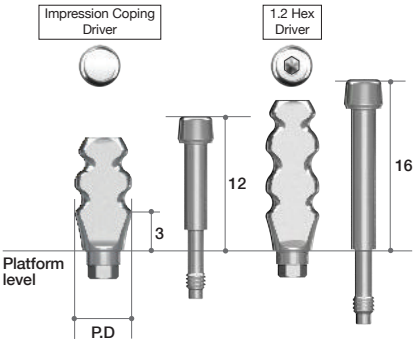
Impression Coping

(2-Piece, Transfer Type)
(For Closed-Tray Technique)

- Guide Pins : AANGPT/AANGPT12H/AANGPT16/ AANGPT16H)

- Streamlined shape ; easy to transfer.
- Anti-rotation grooves match with hex structure of fixtures.
- Should be tightened with Impression Driver (Page.394)
- Impression Coping Driver and Hand Driver(1.2Hex) should be used to ensure Impression Coping is properly tightened.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	12	2-Piece	AANITH4012T
	16		AANITH4016T
Ø5.0	12		AANITH5012T
	16		AANITH5016T
Ø4.0	12	2-Piece Hand driver (1.2 Hex)	AANITH4012HT
	16		AANITH4016HT
Ø5.0	12		AANITH5012HT
	16		AANITH5016HT
Ø6.0	12		AANITH6012HT
Ø7.0	12		AANITH7012HT

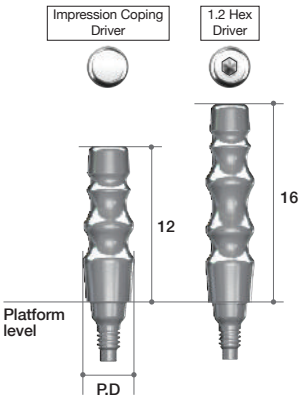


Impression Coping

(1-piece, Transfer Type)
(For Closed-Tray Technique)

- Should be tightened with Impression Driver (Page.394)
- Impression Coping Driver and Hand Driver(1.2Hex) should be used to ensure Impression Coping is properly tightened.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	12	1-Piece	AANITN4012
	16		AANITN4016
Ø5.0	12		AANITN5012
	16		AANITN5016
Ø4.0	12	1-Piece Hand driver (1.2 Hex)	AANITN4012H
	16		AANITN4016H
Ø5.0	12		AANITN5012H
	16		AANITN5016H
Ø6.0	12		AANITN6012H
Ø7.0	12		AANITN7012H



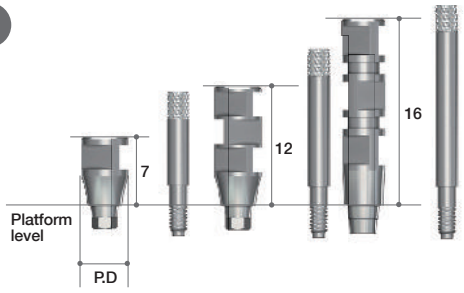
Impression Coping

(2-piece, Pick-up Type)
(For Open-tray Technique)

- Guide Pins : AANGPP0010 (7mm : Short)
  AANGPP0015 (12mm : Long)
  AANGPP0020 (20mm : Extra-long)

- Square structure ; strong anti - rotation function.
- Designed for easy and accurate pick-up impression.
- Extra-long guide pin can be purchased separately.

Profile Diameter	Height (mm)	Type		Ref.C
Ø4.0	7	2-Piece	Hex	AANIPH4007T
	12			AANIPH4012T
	16			AANIPH4016T
	7		Non-Hex	AANIPN4007T
	12			AANIPN4012T
	16			AANIPN4016T
Ø5.0	7		Hex	AANIPH5007T
	12			AANIPH5012T
	7		Non-Hex	AANIPN5007T
	12			AANIPN5012T
Ø6.0	7		Hex	AANIPH6007T
	12			AANIPH6012T
	7		Non-Hex	AANIPN6007T
	12			AANIPN6012T
Ø7.0	7		Hex	AANIPH7007T
	12			AANIPH7012T
	7		Non-Hex	AANIPN7007T
	12			AANIPN7012T



Lab Analog & Temporary Abutment

Lab Analog

Profile Diameter	Color	Ref.C
Ø3.5	Magenta	AANLAF35
Ø4.0 ~ Ø5.5	Blue	AANLAF4055
Ø6.0 ~ Ø8.0	Yellow	AALLAF6080

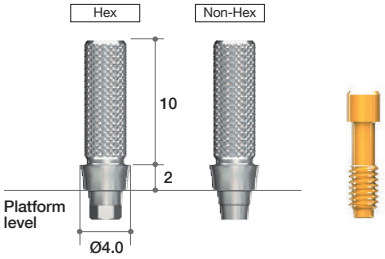
Temporary Abutment

(Titanium)

- Multi Post Screw(AANMSF) included.

- For making provisional restoration.
- Grooved on the post allows strong resin adherence.
- Recommend torque : 25Ncm

Profile Diameter	Cuff Height (mm)	Type	Ref.C
Ø4.0	2	Hex	AANTMH4012T
		Non-Hex	AANTMN4012T



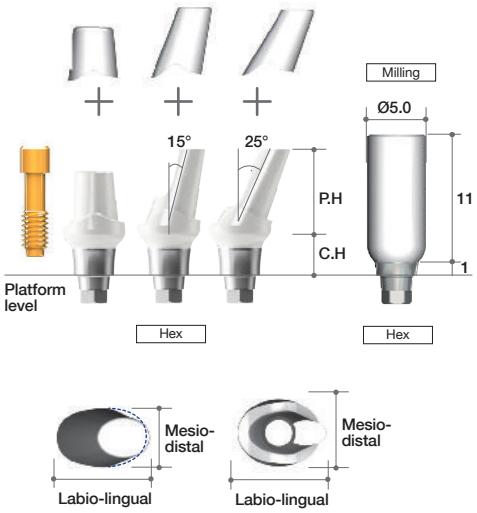
Fuse Abutment

- Straight, 15°, 25° ; Multi Post Screw(AANMSF) included + Fuse Cap included.
- Milling ; Multi Post Screw(AANMSF) included.

- Recommend torque : 25Ncm

Diameter Labio-lingual	Diameter Mesio-distal	C.H (mm)	P.H (mm)	Type	Ref.C
Ø5.5	Ø5.5	4	5.5	Straight	AFAP5545P
	Ø4.5		7	15°	AFAA5415P
				25°	AFAA5425P
Ø5.0		1	11	Milling	AANTAH5012T

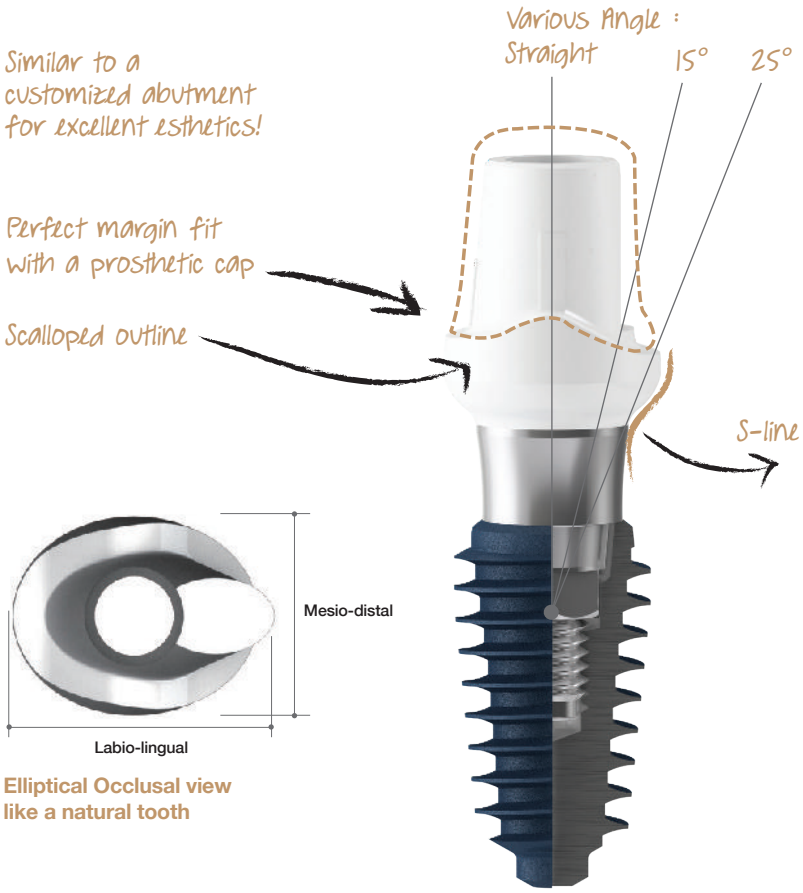
NEW : 4mm cuff height available
→ Adequate for deeply placed implants or thick gingival cases



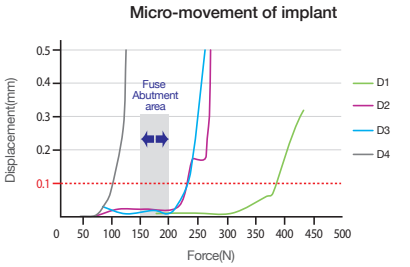
Fuse Abutment ™

Why is the 'Fuse Abutment' essential partner for a temporary crown?

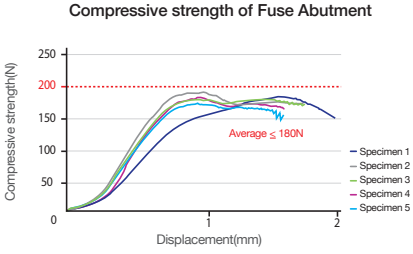
Design concept of Fuse Abutment™



Rationale of Fuse Abutment™

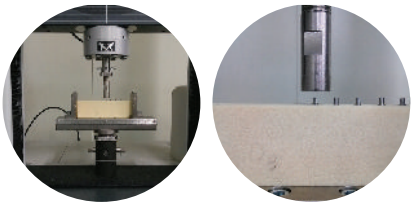


Performed compressive strength test to evaluate the micro movement for bone density using universal testing machine -R&D center in Megagen Implant Co.,Ltd.(2012)-



Performed compressive strength test to evaluate the yield strength for Fuse Abutment using universal testing machine -R&D center in Megagen Implant Co.,Ltd.(2012)-

In 1992, Brunski JB. reported that the implant may has a higher possibility of fibrointergration than osseointegration between bone and implant surface when movements of more than100um occur on the fixture during osseointegration period. (John B. Brunski, Biomechanical factors affecting the bone-dental implant interface. Clinical Materials, Vol. 10, 153-201) Therefore, the implant was needed to protected not to move when immediate loading is carried out. However, it is not easy to manage loading on the fixture, even when we used a resin temporarily with a titanium cylinder. It was thought that it was partly because of the metal component of temporary cylinder, which can deliver excessive forces to the fixture. This was one of the reasons which made clinicians hesitate the immediate loading procedure. So it was necessary to develop a special temporary cylinder. It should have been broken under the force which could lead fibrointegration or failure of osseointegration to protect the fixture. and it would be preferred if it was easy to make a temporary crown on this particular temporary cylinder. We tried to measure the force causing movement of 100μm on a fixture which was placed securely into adequate density of bone without defect. First, AnyRidge implants were placed into the internationally recognized standard bone block with more 40Ncm torque force and an abutment was connected on each implant. Instron equipment was used to measure the force to move a fixture 100μm. The average force was 220N (22.4 kgf). Therefore, if the new temporary abutment can be fractur under this force, it might protect the fixture from movement or failure.



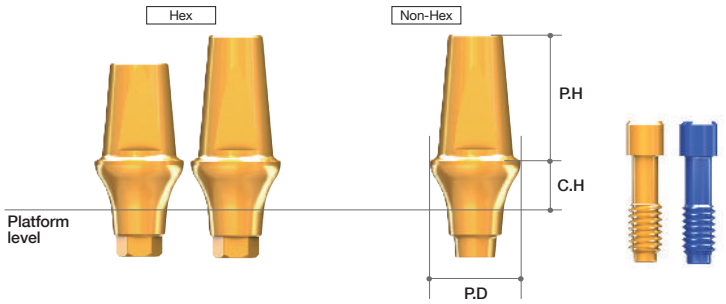
From this experiment, we could developed a special temporary abutment which has lower fracture threshold of less than 200 N (20.4 kgf). It was named as Fuse Abutment. Also it has an anatomic profiles to make temporary prosthetics more esthetic.

Abutment Options (Continued)

EZ Post Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Use with a Hand Driver (1.2 Hex).
- Esthetic gold coloring.
- Two different post heights. (5.5, 7.0mm)
- Four different profile diameters. (Ø4.0, 5.0, 6.0, 7.0)
- Four different cuff heights. (2.0, 3.0, 4.0, 5.0mm)
- Recommend torque : 35Ncm



Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø4.0	2	5.5	Hex	AANEPH4025L
	3			AANEPH4035L
	4			AANEPH4045L
	5			AANEPH4055L
	2	7		AANEPH4027L
	3			AANEPH4037L
	4			AANEPH4047L
	5			AANEPH4057L
Ø4.0	2	5.5	Non-Hex	AANEPN4025L
	3			AANEPN4035L
	4			AANEPN4045L
	5			AANEPN4055L
	2	7		AANEPN4027L
	3			AANEPN4037L
	4			AANEPN4047L
	5			AANEPN4057L
Ø5.0	2	5.5	Hex	AANEPH5025L
	3			AANEPH5035L
	4			AANEPH5045L
	5			AANEPH5055L
	2	7		AANEPH5027L
	3			AANEPH5037L
	4			AANEPH5047L
	5			AANEPH5057L
Ø5.0	2	5.5	Non-Hex	AANEPN5025L
	3			AANEPN5035L
	4			AANEPN5045L
	5			AANEPN5055L
	2	7		AANEPN5027L
	3			AANEPN5037L
	4			AANEPN5047L
	5			AANEPN5057L

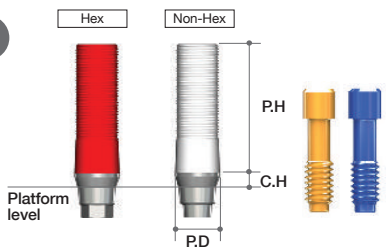
Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø6.0	2	5.5	Hex	AANEPH6025L
	3			AANEPH6035L
	4			AANEPH6045L
	5			AANEPH6055L
	2	7		AANEPH6027L
	3			AANEPH6037L
	4			AANEPH6047L
	5			AANEPH6057L
Ø6.0	2	5.5	Non-Hex	AANEPN6025L
	3			AANEPN6035L
	4			AANEPN6045L
	5			AANEPN6055L
	2	7		AANEPN6027L
	3			AANEPN6037L
	4			AANEPN6047L
	5			AANEPN6057L
Ø7.0	2	5.5	Hex	AANEPH7025L
	3			AANEPH7035L
	4			AANEPH7045L
	5			AANEPH7055L
	2	7		AANEPH7027L
	3			AANEPH7037L
	4			AANEPH7047L
	5			AANEPH7057L
Ø7.0	2	5.5	Non-Hex	AANEPN7025L
	3			AANEPN7035L
	4			AANEPN7045L
	5			AANEPN7055L
	2	7		AANEPN7027L
	3			AANEPN7037L
	4			AANEPN7047L
	5			AANEPN7057L

Gold Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Useful to make a customized abutment in difficult situations.
- Precious and non-precious alloys.
- Melting point of gold alloy : 1063°C
- Threaded sleeves for convenient Resin / Wax-up.
- Recommend torque : 30Ncm

Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø4.0	1	11	Hex	AANGAH4012L
			Non-Hex	AANGAN4012L

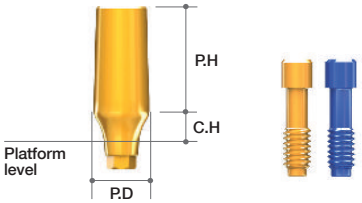


Milling Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Long post enables easier customization from milling.
- Recommend torque : 35Ncm

Profile Diameter	Cuff Height(mm)	Post Height(mm)	Ref.C
Ø4.0	2	9	AANMAH4029L
	3		AANMAH4039L
	4		AANMAH4049L
	5		AANMAH4059L
Ø5.0	2	9	AANMAH5029L
	3		AANMAH5039L
	4		AANMAH5049L
	5		AANMAH5059L
Ø6.0	2	9	AANMAH6029L
	3		AANMAH6039L
	4		AANMAH6049L
	5		AANMAH6059L
Ø7.0	2	9	AANMAH7029L
	3		AANMAH7039L
	4		AANMAH7049L
	5		AANMAH7059L

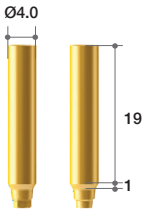


Milling Abutment Type II (GALLI Abutment)

- AnyRidge Internal : Multi Post Screw (AANMSF/AANMST) included.

- Long post enables easier customization from milling.
- Recommend torque : 35Ncm

Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø4.0	1	19	Hex	ARBOT4019HL
			Non-Hex	ARBOT4019NL



GALLI Technique

MegaGen family thanks to MD. Oscar Alonso Gonzalez & Dr. Fabio Galli for the suggestion of B.O.P.T abutment

- To obtain thick, healthy and stable soft tissue around tooth

Characteristics of GALLI Technique

1. Morphology without a finish line.
2. Conical Shape.
3. Prosthetic Platform Switching

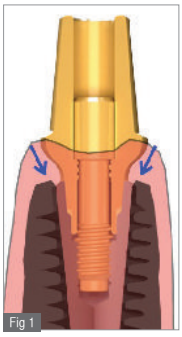


Fig 1

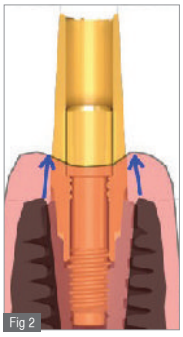


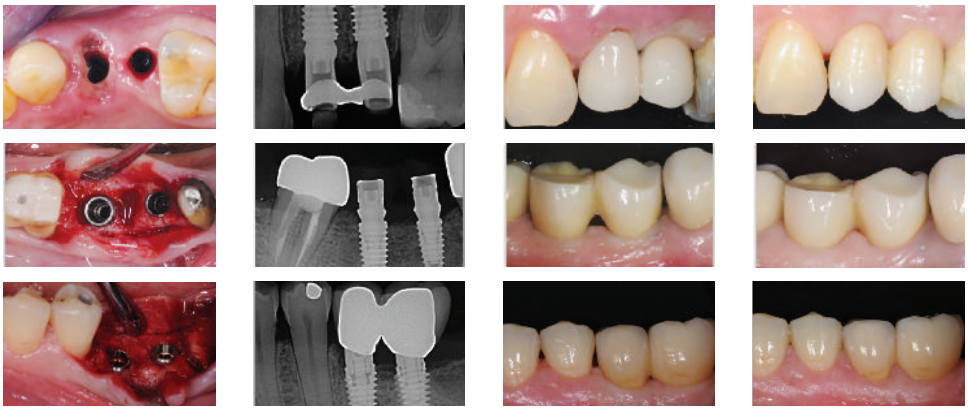
Fig 2

Fig 1. With its divergent profile, it tends to stabilize the circular fibers of the connective tissue towards apical.

Fig 2. In the same way as with the teeth, this abutment facilitates the stabilization of the circular fibers of the connective tissue at a more coronal level compared to a standard rehabilitation.

- Courtesy of Dr. Fabio Galli

GALLI Technique Clinical Case

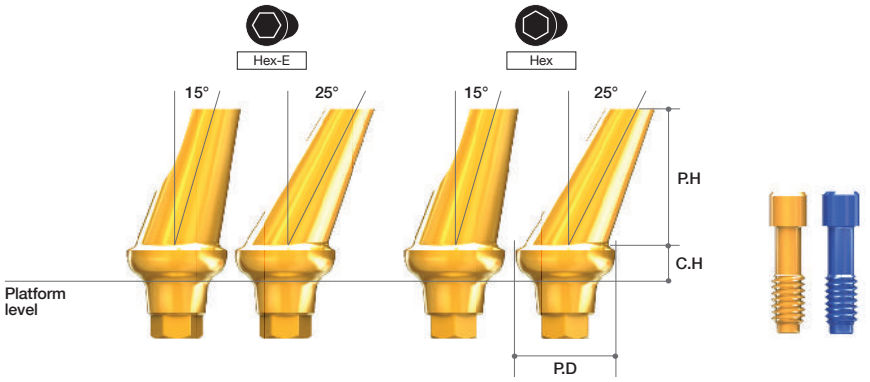


Abutment Options

Angled Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Two different angulations. (15°, 25°)
- Four different profile diameters. (Ø4.0, 5.0, 6.0, 7.0)
- Four different cuff heights. (2, 3, 4, 5mm)
- Can cover 12 different directions. [six to the surface(Hex), six to the edge of hex(Hex-E)]
- Esthetic gold coloring.
- Minimized screw head length needs minimum height to prevent milling problems.
- Recommend torque : 35Ncm



Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Angle	Ref.C
Ø4.0	2	7	Hex	15°	AANAAH4215L
	3				AANAAH4315L
	4				AANAAH4415L
	5				AANAAH4515L
	2		Hex-E		AANAAE4215L
	3				AANAAE4315L
	4				AANAAE4415L
	5				AANAAE4515L
	2		Hex	25°	AANAAH4225L
	3				AANAAH4325L
	4				AANAAH4425L
	5				AANAAH4525L
	2		Hex-E		AANAAE4225L
	3				AANAAE4325L
	4				AANAAE4425L
	5				AANAAE4525L
Ø5.0	2	7	Hex	15°	AANAAH5215L
	3				AANAAH5315L
	4				AANAAH5415L
	5				AANAAH5515L
	2		Hex-E		AANAAE5215L
	3				AANAAE5315L
	4				AANAAE5415L
	5				AANAAE5515L
	2		Hex	25°	AANAAH5225L
	3				AANAAH5325L
	4				AANAAH5425L
	5				AANAAH5525L
	2		Hex-E		AANAAE5225L
	3				AANAAE5325L
	4				AANAAE5425L
	5				AANAAE5525L

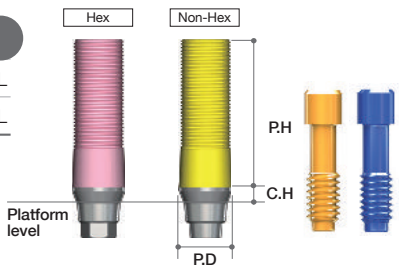
Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Angle	Ref.C
Ø6.0	2	7	Hex	15°	AANAAH6215L
	3				AANAAH6315L
	4				AANAAH6415L
	5				AANAAH6515L
	2		Hex-E		AANAAE6215L
	3				AANAAE6315L
	4				AANAAE6415L
	5				AANAAE6515L
	2		Hex	25°	AANAAH6225L
	3				AANAAH6325L
	4				AANAAH6425L
	5				AANAAH6525L
	2		Hex-E		AANAAE6225L
	3				AANAAE6325L
	4				AANAAE6425L
	5				AANAAE6525L
Ø7.0	2	7	Hex	15°	AANAAH7215L
	3				AANAAH7315L
	4				AANAAH7415L
	5				AANAAH7515L
	2		Hex-E		AANAAE7215L
	3				AANAAE7315L
	4				AANAAE7415L
	5				AANAAE7515L
	2		Hex	25°	AANAAH7225L
	3				AANAAH7325L
	4				AANAAH7425L
	5				AANAAH7525L
	2		Hex-E		AANAAE7225L
	3				AANAAE7325L
	4				AANAAE7425L
	5				AANAAE7525L

CCM Abutment

- Multi Post Screw(AANMSF/AANMST) included.

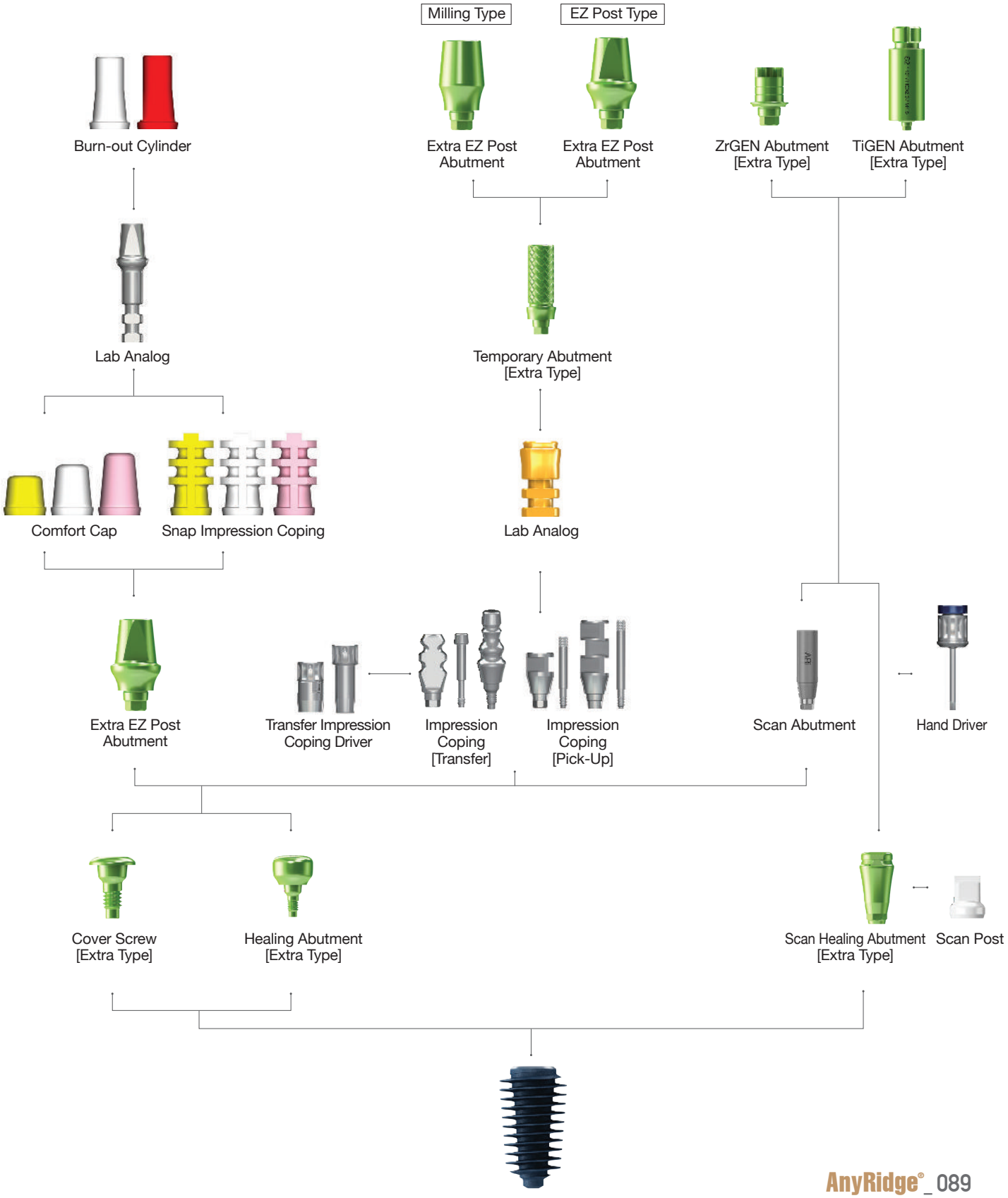
- Useful to make a customized abutment in difficult situations.
- Can be casted with non-precious alloys (Ni-Cr, Cr-Co alloys).
- Non-precious melting temperature : Depend on Manufacturer
- Threaded sleeves for convenient Resin / Wax-up.
- Melting temperature of CCM : 1300~1400°C
- Recommend torque : 35Ncm

Profile Diameter	Cuff Height(mm)	Post Height(mm)	Type	Ref.C
Ø4.0	1	11	Hex	AANCAH4012L
			Non-Hex	AANCAN4012L



I. Fixture Level Prosthesis

1. Fixture Level Prosthesis_Extra EZ Post



S2 Option for successful 'second molar implant'

AnyRidge challenges to the HIGH SURVIVAL RATE even at the second molar

Let's remind!

Second molar implants have a much lower success rate than other implants

1) Simple Literature Review:

General implant success rate

99.7% 10-year survival rate

- van Velzen FJ et al. (2014)

95.6%, 94.4%, 96.1%, 100%, 90.6%, 95.7% - CSR of 759 implants in single-tooth prostheses, cantilever fixed, partial prostheses, fixed partial prostheses, fixed complete prostheses, implant/tooth-connected prostheses, and over-dentures ***– Romeo E et al. (2004)***

Second molar implant success rate

89.0% CSR for 392 implants in posterior mandible for 6 yrs

- Parein et al. (1997)

91.1% 2nd molar survival rate for 2 yrs ***- YK kim et al. (2010)***

82.9%, 91.5% Prospective study on 282 implants placed in Mx and Mn molar positions (6 years cumulative study) ***Becker et al. (1999)***

8.16% failure in the Mx, **4.93%** failure in Mn ***- Moy et al (2005)***

Problem

2) Why less success rate at the Second Molar?

Handicaps of the Second Molar Implant ;

1. Less quality & quantity of alveolar bone

- Maxillary 2nd Molar site usually show less quality (Type IV or worse) and/or limited height due to Sinus pneumatization.
- Mandible 2nd Molar site usually show less blood supply which is important for adeguate alveolar bone metabolism.And limited height of bone due to the inferior mandibular nerve.

2. Strong Occlusal force

Due to special joint system at TMJ, the Second Molar usually endure strong occlusal force during mastication.

3. Hygiene Problem

Due to remote position, it's very difficult to maintain hygiene at the second Molar, especially a t the distal area, So easy to get peri-implantitis than others.

Solution

3) How to overcome less success rate?

Possible solution

- We need an implant system which can provide **excellent initial stability**① even at the loose bone and limited height of bone.
- We need an implant system which can provide **enough surface area**② for osseointegration, even at the limited height of bone.
- We need to provide **enough space for angiogenesis and blood supply**③ for more active bone remodeling.

We need **stronger implant fixture and abutment connection**④ to withstand occlusal forces and lateral movement.

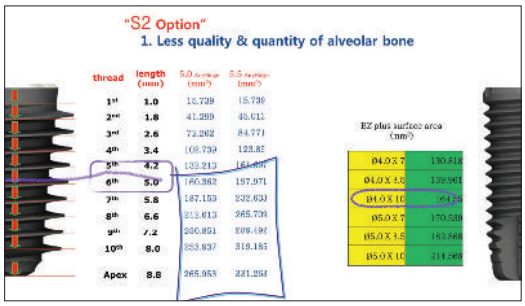
We need to choose **adequate material**⑤ for abutment and crown, which retains much less plaque, even with less accessibility and hygiene skills.

4) MegaGen's suggestion for the second molar implant

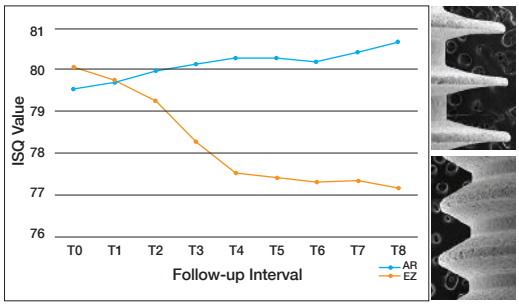
"S2 Option" strongly recommended by KOLs of MegaGen.

① Excellent initial stability at loose bone
② Enough surface area for osseointegration

Already well-know advantages **of** AnyRidge Implant System.



[Surface area comparison between AnyRidge and EZ plus]



[ISQ value comparison between AnyRidge and EZ plus]

Second molar implants have a much lower success rate than other implants

2nd molar immediate placement case

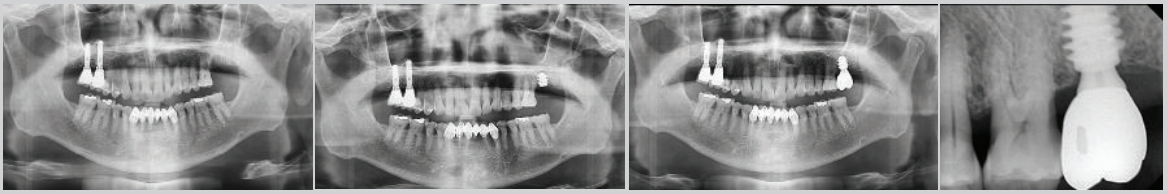


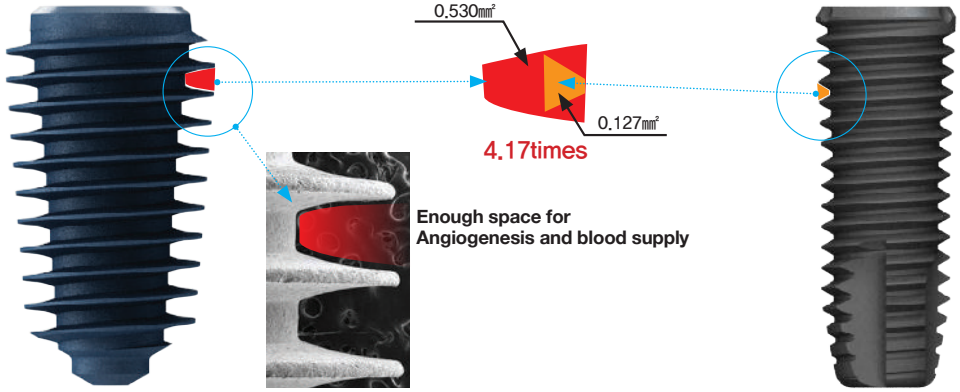
Fig.1 After extraction **Fig.2** Immediate placement **Fig.3** Final restoration **Fig.4** 7yr F/U

- 4.8 core diameter and deep thread AnyRidge implant will create very strong and satisfactory initial stability at the large extraction socket of second molar.

- Courtesy of Dr. Kwang Bum Park

③ Enough space for angiogenesis and blood supply through the inter-thread space

- Knife thread design of AnyRidge implant creates the maximum space for blood supply



[AnyRidge] **[EZ Plus]**

④ Stronger fixture and abutment connection

Fixture selection

- As minimum, use 3.8mm core diameter AnyRidge implant
- If enough bone width, use 4.3mm or 4.8mm core diameter AnyRidge implant
- For large extraction socket, use 4.8mm core diameter & deep thread AnyRidge implant

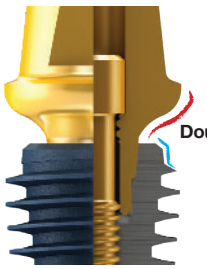
Core Diameter	Fixture Diameter									
	Ø3.5	Ø4.0	Ø4.5	Ø5.0	Ø5.5	Ø6.0	Ø6.5	Ø7.0	Ø7.5	Ø8.0
∅2.8										
Thread depth	0.3									
∅3.3										
Thread depth		0.35	0.6	0.85	1.1					
∅3.8										
Thread depth			0.35	0.6	0.85					*$2 Option*
∅4.0										
Thread depth				0.45	0.7	0.95				
∅4.3										
Thread depth				0.35	0.6	0.85				
∅4.8										
Thread depth					0.35	0.6	0.85	1.1	1.35	1.6

Refer to page. 063

Abutment selection

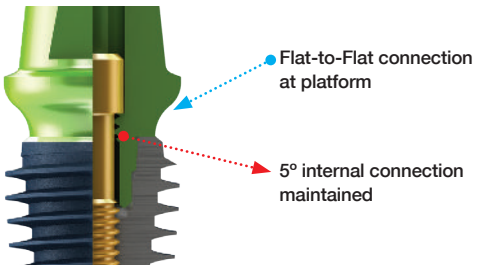
- 5° AnyRidge connection is really strong & shows almost no biological width
- Double offset (implant switching & abutment switching) is very helpful to improve soft tissue esthetics & health
- However, for second molar implant, strength against lateral occlusal force is more critical than esthetics
- So, for second molar abutment, use Extra EZ Connection

[Normal connection]



Compressive strength is improved by **67%**

★ [S2 Option : Double connection]



This 'Double connection' has double advantages.

1. Strong resistance to lateral occlusal forces
2. No sinking of prosthetics
   - Most of internal connection shows 30~50㎛ of sinking following delivery of crown
   - S2 Option will not show sinking phenomenon, while maintaining the 5° internal connection

⑤ Adequate material for hygiene

Our KOLs recommend zirconia customized abutment and/or zirconia monolithic crown for the second molar implant.

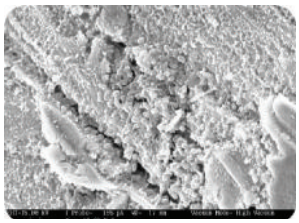
Bioinert Bioaffinity

ZrGEN(Extra EZ)

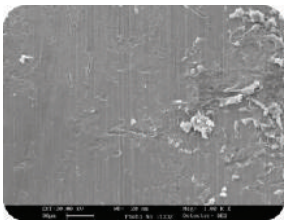
ZrGEN is the brand name of Mega-Gen Titanium Base. The strength of ZrGEN frees you from the chipping to conventional PFM prosthesis. Monolithic zirconia crowns have no metal substructure,

enhancing better survival rate !

Bacterial Adhesion on Commercially Pure Titanium and Zirconium Oxide Disks: An In Vivo Human Study
Antonio Scarano, Maurizio Piattelli, Sergio Caputi, Gian Antonio Favero, and Adriano Piattelli JP 2004
The mucosal barrier at implant abutments of different materials
Maria Welander, Ingemar Abrahamsson, Tord Berglundh COIR19, 2008; 635–641



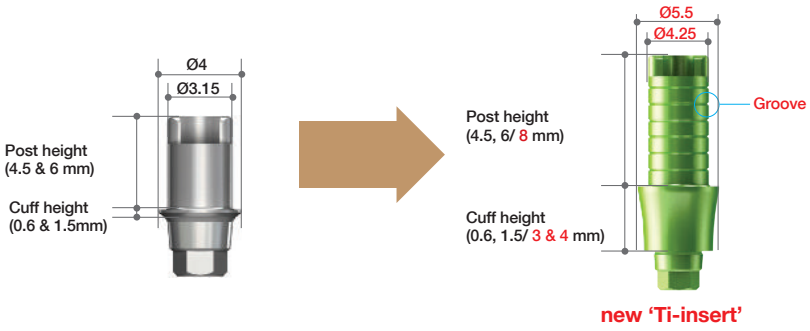
Titanium. A homogeneous layer of cocci or filamentous bacteria covers the titanium surface



Zirconium oxide. A small number of bacteria cover the zirconium oxide surface.

(from left: Ti, ZrO2, Ti, Au/Pt-alloy) in place 1 month after implant placement

- However, the Zirconia customized abutment has limitations on strength which leads fracture of zirconia and/or cement-break between ti-insert and Zirconia abutment.
- So MegaGen developed new 'Ti-insert' for the stronger customized abutment!



new 'Ti-insert'

S2 Option with AnyRidge Clinical Case

Clinical Case 1

- Courtesy of Dr. Seung Yeup Lee

S2 Option Line-up with AnyRidge implant can be the best solution in posterior zone

Fig 1. Initial Photo

Fig 2. Harvest Autogenous Bone

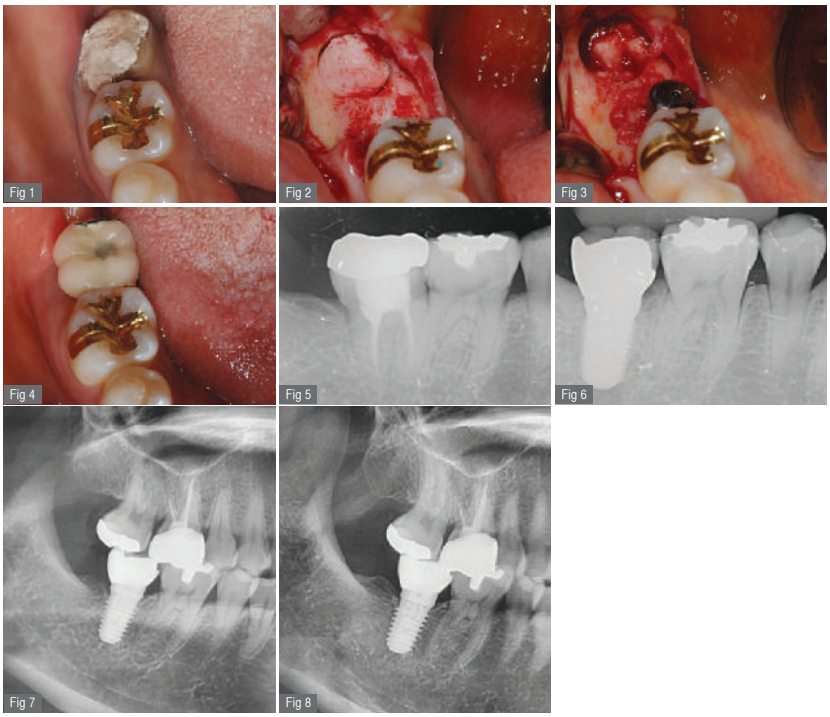
Fig 3. Implant placement

Fig 4. Provisionalization

Fig 5, 6. Before / After Surgery

Fig 7. Final Delivery

Fig 8. 6 yrs F/U



Clinical Case 2

- Courtesy of Dr. Seung Yeup Lee

S2 Option Line-up with AnyRidge implant can be the best solution in posterior zone

Fig 1. Intra Oral before surgery

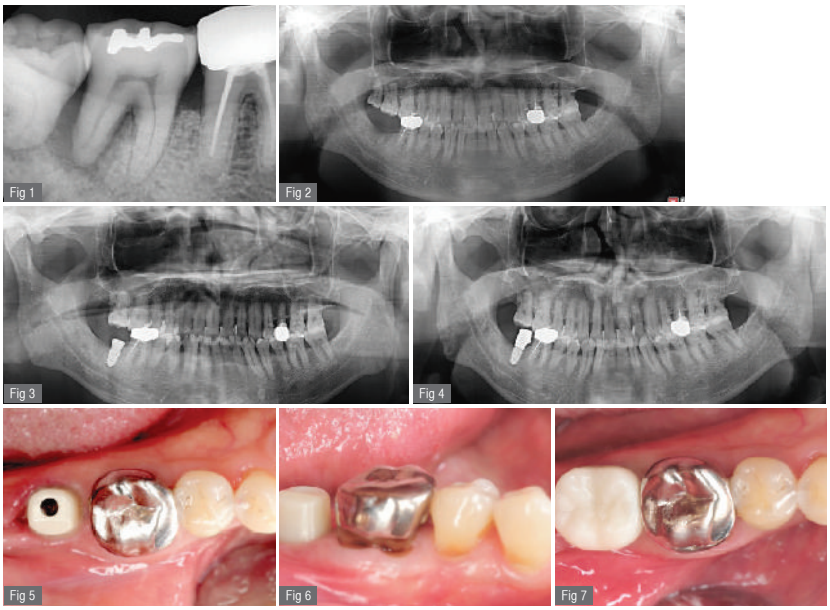
Fig 2. Panorama view

Fig 3. After Implant Placement

Fig 4. Connect Extra EZ-Post

Fig 5. Zirconia Customized Abutment using ZrGen

Fig 6, 7. Connect PMMA

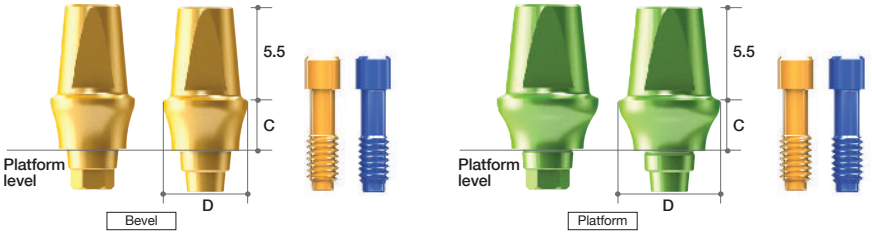


Extra EZ Post Abutment

Extra EZ Post Abutment

- Multi Post Screw(AANMSF/AANMST) included.

- Useful when fixture is exposed over the gum line.
- Recommend torque : 35Ncm



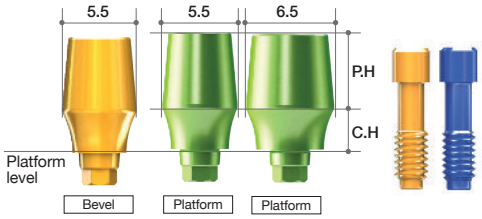
EZ Post Type

Core Diameter	Profile Diameter	Cuff	Type		Ref.C
Ø3.3	Ø5.0	2	Bevel	Hex	ARNEEH5025L
		3			ARNEEH5035L
		4			ARNEEH5045L
		5			ARNEEH5055L
		2		Non-Hex	ARNEEN5025L
		3			ARNEEN5035L
		4			ARNEEN5045L
		5			ARNEEN5055L
	Ø6.0	2		Hex	ARNEEH6025L
		3			ARNEEH6035L
		4			ARNEEH6045L
		5			ARNEEH6055L
		2		Non-Hex	ARNEEN6025L
		3			ARNEEN6035L
		4			ARNEEN6045L
		5			ARNEEN6055L

Core Diameter	Profile Diameter	Cuff	Type		Ref.C
Ø4.0	Ø6.0	2	Platform	Hex	ARREEH6025L
		3			ARREEH6035L
		4			ARREEH6045L
		5			ARREEH6055L
		2		Non-Hex	ARREEN6025L
		3			ARREEN6035L
		4			ARREEN6045L
		5			ARREEN6055L
	Ø7.0	2		Hex	ARREEH7025L
		3			ARREEH7035L
		4			ARREEH7045L
		5			ARREEH7055L
		2		Non-Hex	ARREEN7025L
		3			ARREEN7035L
		4			ARREEN7045L
		5			ARREEN7055L

Milling Type

Core Diameter	Profile Diameter	Cuff Height	Post Height	Type	Ref.C
Ø3.3	Ø5.5	3	5.5	Bevel	AANEEH3335L
Ø4.0	Ø5.5			Platform	AANEEH4035L
Ø4.8	Ø6.5				AANEEH4835L



- AANEEH3335 used for fixture (Ø4.0~5.5)
- AANEEH4035 used for fixture (Ø5.0, Ø5.5_Core ø4)
  - AANEEH4035 is for the Core Diameter ø4.0mm (Fixture Diameter Ø5.0~5.5mm). It also can be used for Fixture Diameter Ø6.0~8.0mm for platform switching.
- AANEEH4835 used for fixture (Ø6.0~8.0)
- Recommend torque : 35Ncm

Components for Extra EZ Post Abutment (Continued)

Cover Screw

(Extra Type)

- Included in the fixture package.

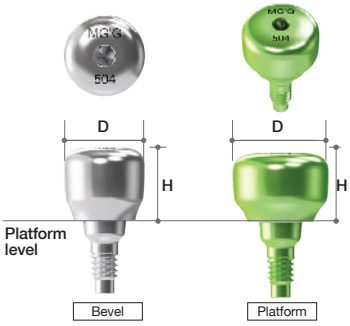
- Use with a Hand Driver(1.2 Hex).
- Used for submerged type surgery.
- Protects the inner structure of a fixture.
- Different heights can be chosen according to the position of fixture below the crest.
- 1.6mm and 2.6mm height of Cover Screw can be purchased separately.
- Recommend torque : by hand (5 - 8Ncm)

Core Diameter	Profile Diameter	Type	Ref.C
Ø3.3	Ø4.0	Bevel	AANCSF4008
Ø4.0	Ø4.25	Platform	AANCSF4208

Extra Healing Abutment

- Use with a Hand Driver(1.2 Hex).
- Used for non-submerged type surgery or for two stage surgery.
- Choose appropriate diameter and height of Healing Abutment according to situation.
- Helps to form suitable emergence profile during period of gingival healing.
- Recommend torque : by hand (5 - 8Ncm)

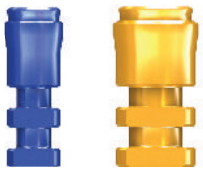
Core Diameter	Profile Diameter	Height (mm)	Type	Ref.C
Ø3.3	Ø5.0	3	Bevel	ARNEHA503
		4		ARNEHA504
		5		ARNEHA505
		6		ARNEHA506
		7		ARNEHA507
	Ø6.0	3		ARNEHA603
		4		ARNEHA604
		5		ARNEHA605
		6		ARNEHA606
		7		ARNEHA607
Ø4.0	Ø4.2	3	Platform	ARREHA403
		4		ARREHA404
		5		ARREHA405
		6		ARREHA406
		7		ARREHA407
		8		ARREHA408
		9		ARREHA409
	Ø6.0	3		ARREHA603
		4		ARREHA604
		5		ARREHA605
		6		ARREHA606
		7		ARREHA607
	Ø7.0	3		ARREHA703
		4		ARREHA704
		5		ARREHA705
		6		ARREHA706
		7		ARREHA707
Ø4.8	Ø6.5	4		AANHAF484



Lab Analog

- Blue : use Bevel type
- Yellow : use Platform type

Profile Diameter	Color	Ref.C
Ø4.0 ~ Ø5.5	Blue	AANLAF4055
Ø6.0 ~ Ø8.0	Yellow	AALLAF6080



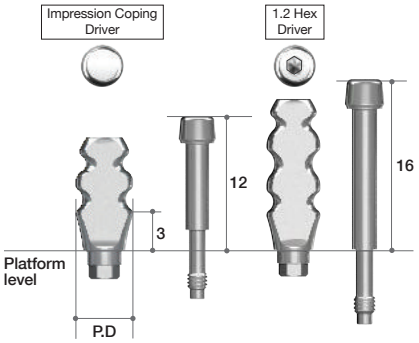
➲ Components for Extra EZ Post Abutment

Impression Coping

(2-piece, Transfer Type)
(For Closed-tray Technique)

- Streamlined shape ; easy to transfer.
- Anti-rotation grooves match with hex structure of fixtures.
- Should be tightened with Impression Coping Driver (Page.394)
- Special impression coping screw which can be used with a 1.2mm hex driver is available on request.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	12	2-Piece	AANITH4012T
	16		AANITH4016T
Ø5.0	12		AANITH5012T
	16		AANITH5016T
Ø4.0	12	2-Piece Hand driver (1.2 Hex)	AANITH4012HT
	16		AANITH4016HT
Ø5.0	12		AANITH5012HT
	16		AANITH5016HT
Ø6.0	12		AANITH6012HT
Ø7.0	12		AANITH7012HT

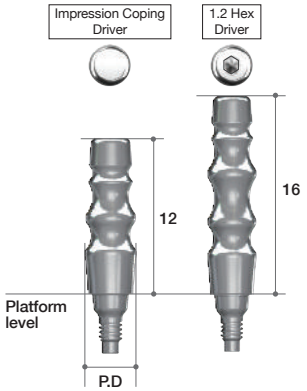


Impression Coping

(1-piece, Transfer Type)
(For Closed-tray Technique)

- Should be tightened with Impression Coping Driver (Page.394)

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	12	1-Piece	AANITN4012
	16		AANITN4016
Ø5.0	12		AANITN5012
	16		AANITN5016
Ø4.0	12	1-Piece Hand driver (1.2 Hex)	AANITN4012H
	16		AANITN4016H
Ø5.0	12		AANITN5012H
	16		AANITN5016H
Ø6.0	12		AANITN6012H
Ø7.0	12		AANITN7012H



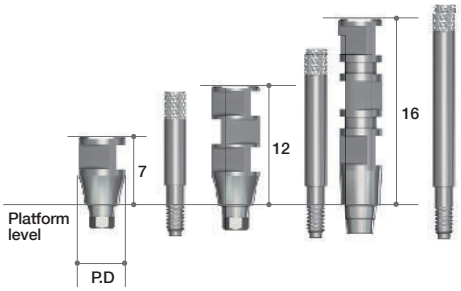
Impression Coping

(2-piece, Pick-up Type)
(For Open-tray Technique)

- Guide Pins : AANGPP0010 (7mm : Short) / AANGPP0015 (12mm : Long) / AANGPP0020 (20mm : Extra-long)

- Square structure ; strong antirotation function.
- Designed for easy and accurate pick-up impression.
- Extra-long guide pin can be purchased separately.

Profile Diameter	Height (mm)	Type		Ref.C
Ø4.0	7	2-Piece	Hex	AANIPH4007T
	12			AANIPH4012T
	16			AANIPH4016T
	7		Non-Hex	AANIPN4007T
	12			AANIPN4012T
	16			AANIPN4016T
Ø5.0	7		Hex	AANIPH5007T
	12			AANIPH5012T
	7		Non-Hex	AANIPN5007T
	12			AANIPN5012T
Ø6.0	7		Hex	AANIPH6007T
	12			AANIPH6012T
	7		Non-Hex	AANIPN6007T
	12			AANIPN6012T
Ø7.0	7		Hex	AANIPH7007T
	12			AANIPH7012T
	7		Non-Hex	AANIPN7007T
	12			AANIPN7012T

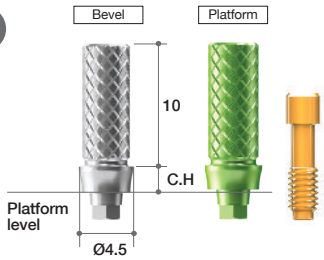


Temporary Abutment

(Extra Type)

- Fixture package included.

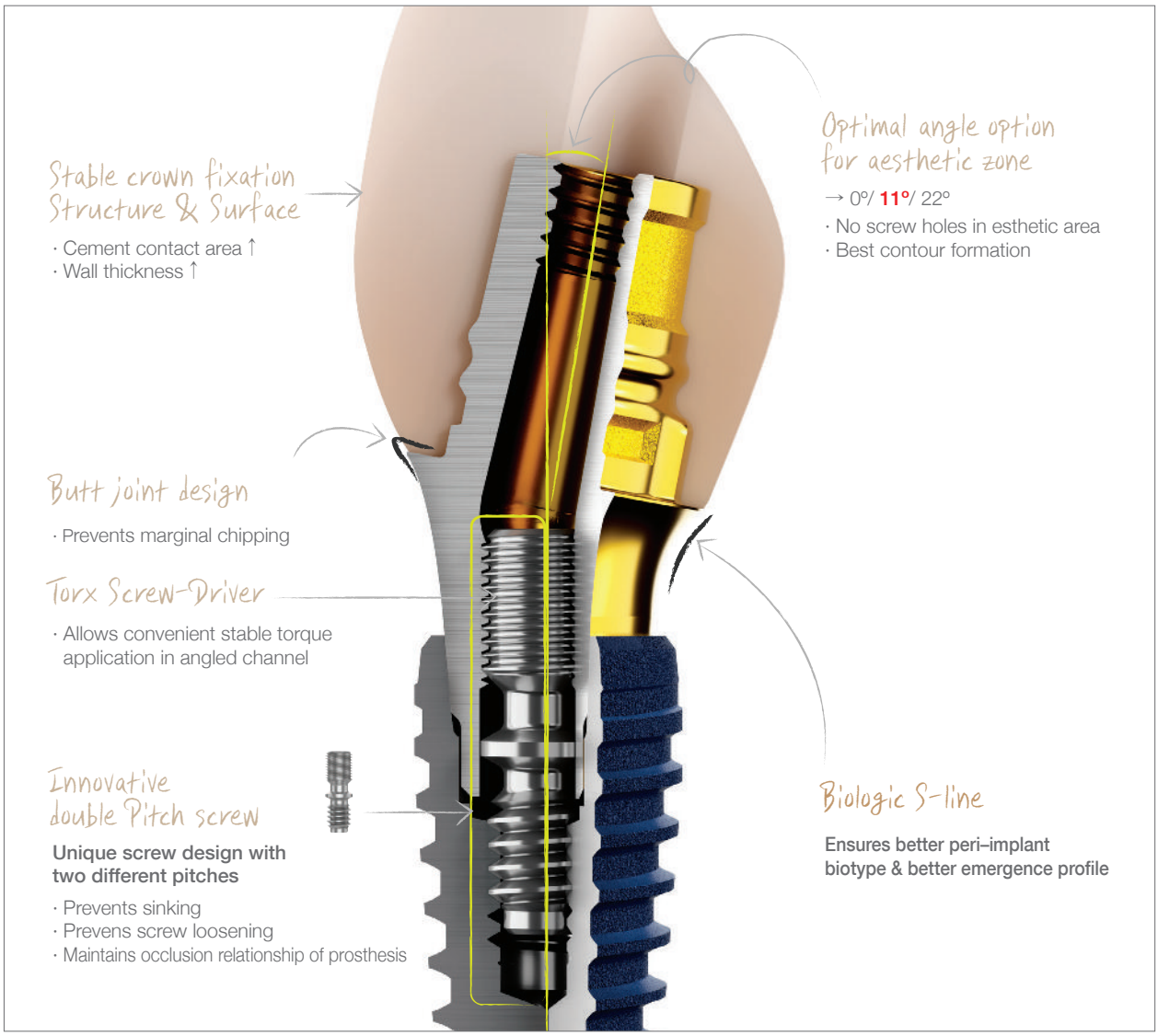
Core Diameter	Profile Diameter	Cuff Height (mm)	Type		Ref.C
Ø3.3	Ø4.5	2	Bevel	Hex	ARNTAH4510T
		2		Non-Hex	ARNTAN4510T
Ø4.0	Ø4.75	2	Platform	Hex	ARRTAH4710T
		2		Non-Hex	ARRTAN4710T



NEW

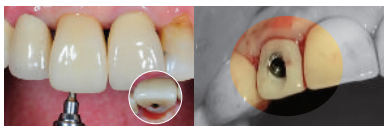
RC-BASE Abutment

Another innovation in AnyRidge prosthetics for anterior aesthetics

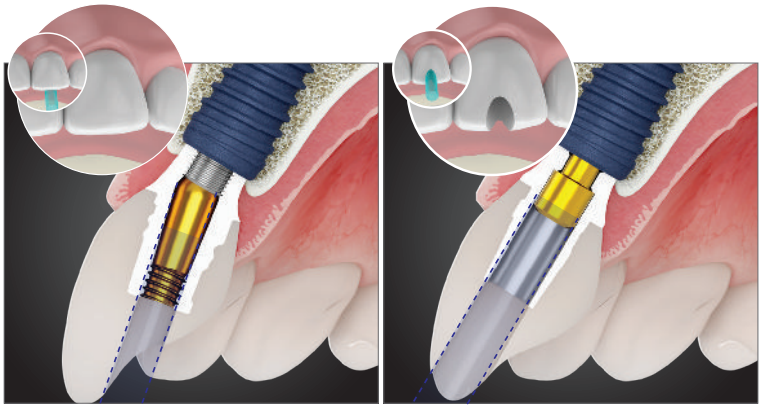


Ideal angled screw channel

No screw hole in aesthetic area ensures best aesthetic result.
Perfect surgery and ideal implant position but…



RC-Base abutment™ Conventional abutment

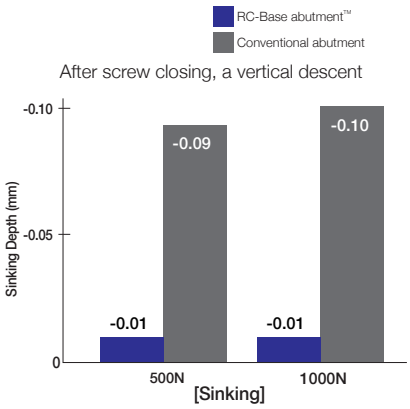


RC-Base abutment™ Conventional abutment

· The angled tool channel allows the screw hole to be removed from the aesthetic area.
· The access channel for a screw-retained prosthesis can interfere with the aesthetics if the implant is angled too far labially. In such cases, a cemented type of retention is the usual choice.

Innovative DP Screw™ (Double-Pitch Screw)

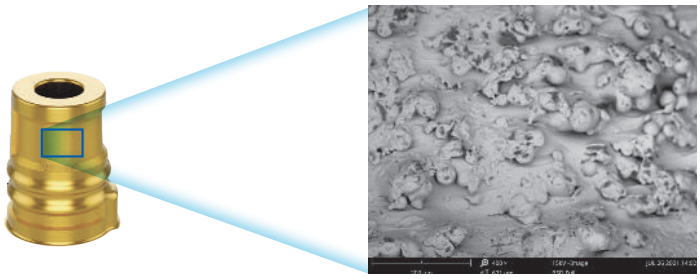
Structured to minimize sinking, which is a key disadvantage of all internal fixtures



Stronger cementation force with zirconia custom

Maximized contact surface area

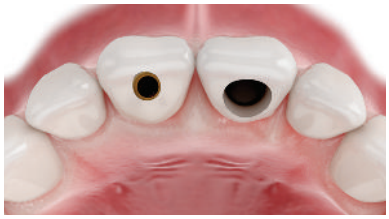
- The surface roughness of the RC-Base abutment™ is created by sandblasting.
- This maximizes the contact surface area with cement.
- Prevents cement overflow close to the screw channel and near the platform to the basal face.

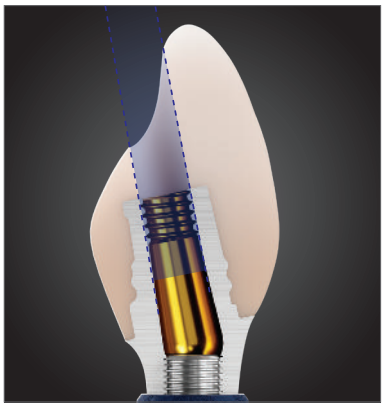


Retentive surface

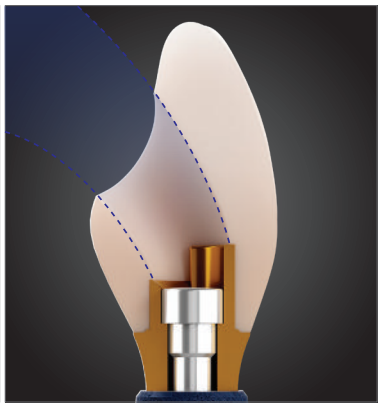
Wider zirconia wall thickness due to better & easier screw driver access

- Better wall thickness is secured via angled tool channel.
- Abutment is provided with screw already attached, so no space needed for screw head.





RC-Base abutment™

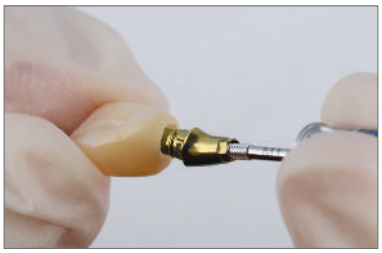


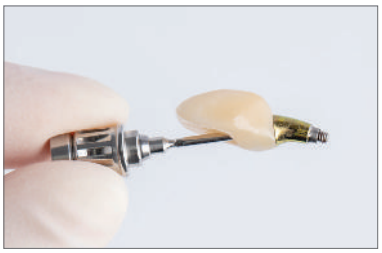
Angled screw channel of crown

No side effects from residual cement

Complications from residual cement include:

- Peri-implantitis, periodontitis
- Bone loss → implant failure





① Final crown is cemented outside oral cavity ② All excess cement is removed from final prosthesis

RC-Base can solve your worries about ...

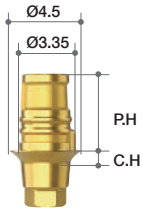
- If you want to make a zirconia custom abutment with CAM equipment - If you are concerned about a screw hole in the aesthetic area
- If you are worried that the contour formation will not work properly - If you are concerned about the strength of your zirconia custom abutment
- If you are concerned about screw loosening due to excessive mastication - If there is a risk of inflammation due to residual cement in the case of deep placement

➲ RC-Base Abutment option

RC-Base Abutment
(Straight)

- DP Screw(1-MTO-D2T5) included
- Use with Screw Driver(MTO-DIT5-FW)
- Various cuff heights (2/ 3/ 4mm)
- Recommended tightening torque: 25Ncm

Diameter	Angle	Post Height (mm)	Cuff Height (Labial/Lingual) (mm)	Ref.C
Ø4.5	0°	4.7	2 (1.1)	D-MA35-C0G2-AS
			3 (1.9)	D-MA35-C0G3-AS
			4 (2.8)	D-MA35-C0G4-AS



RC-Base Abutment
(11°)

- DP Screw(1-MTO-D2T5) included
- Use with Screw Driver(MTO-DIT5-FW).
- Various cuff heights (2/ 3/ 4mm)
- Recommended tightening torque: 25Ncm

Diameter	Angle	Post Height (mm)	Cuff Height (Labial/Lingual) (mm)	Ref.C
Ø4.5	11°	4.7	2 (1.9/1.1)	D-MA35-C1G2-AS
			3 (2.7/1.9)	D-MA35-C1G3-AS
			4 (3.6/2.7)	D-MA35-C1G4-AS

RC-Base Abutment
(22°)

- DP Screw(1-MTO-D2T5) included
- Use with Screw Driver(MTO-DIT5-FW)
- Various cuff heights (2/ 3/ 4mm)
- Recommended tightening torque: 15Ncm

Diameter	Angle	Post Height (mm)	Cuff Height (Labial/Lingual) (mm)	Ref.C
Ø4.5	22°	4.7	2 (2.8/1.1)	D-MA35-C2G2-AS
			3 (3.5/1.9)	D-MA35-C2G3-AS
			4 (4.4/2.7)	D-MA35-C2G4-AS

DP Screw

- Double-Pitch Screw

Torx	Ref.C
T5	1-MTO-D2T5

Screw Driver

- Fracture torque : 35Ncm
- Trox T5

Torx	Length (mm)	Ref.C
T5	30	MTO-DIT5-FW-BOX

Try-In Tool

- Used to move RC-Base abutment to fixture

Type	Length (mm)	Ref.C
M1.8	30	MTO-DT-BOX

Right Angle Adapter

- Connect to Screw Driver(MTO-DIT5-FW) for use with Torque Wrench

Type	Ref.C
Handpiece type	TTAI100

CE

Components of Trial Intro Set

Ref.C

MA35-Set-16

Clinical Case

- Courtesy of Dr. Sam Omar

Pre-op clinical view

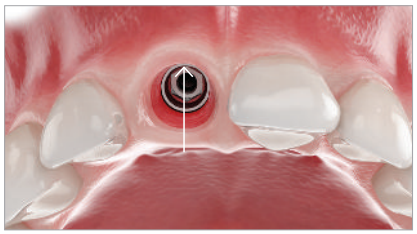
Immediate load occlusal view

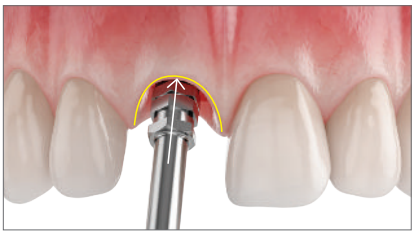
#13 COG2, #22 C1G3 rc_base was used

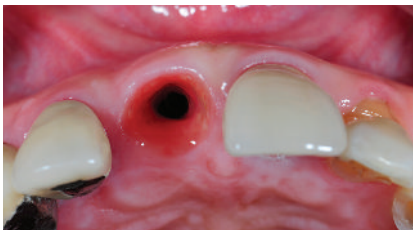
Final prosthesis clinical view

▸▸ RC-Base Clinical Workflow

- Courtesy of Dr. Seung Yeup Lee







Fixture Positioning Guide

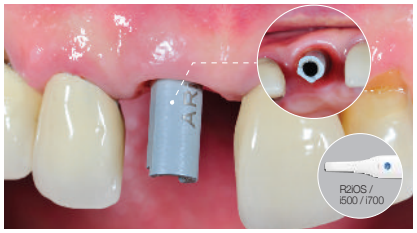
For the angled-type RC-Base abutment™, the post is inclined toward the edge of the connection, so the edge direction should be in the labial (Lingual) direction when installing the fixture.

※The hex structure of the handpiece connector allows the hex direction of the fixture connector to be adjusted according to the implant placement.

Fixture Connection

Hex-E

Handpiece Connector

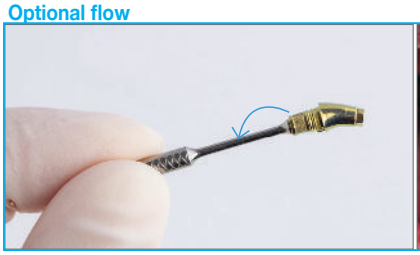


Oral scan using scan abutment

Insert the scan abutment in accordance with the hex direction of the inner surface of the fixture, and connect the abutment screw.

Check that the scan abutment is completely connected to the inner surface of the fixture, then perform oral scan.

Optional flow



Try-In Tool

After separating the scan abutment, use the Try-In Tool to check the cuff height and angulation of the RC-Base abutment™. Use the Try-In Tool for easy pick-up and connection. Connect the screw tip of the Try-In Tool to the innerthread of the top part of the RC-Base abutment in a clockwise direction.

Try-In Tool

RC-Base Try-In

Check the cuff height and the position of the screw hole by connecting the RC-Base abutment™ attached to the Try-In Tool to the implanted fixture.

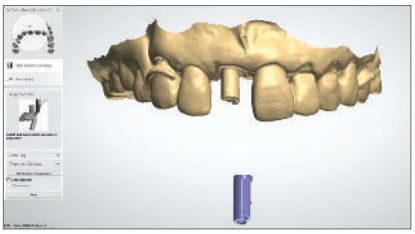
The position of the screw hole can be adjusted in 6 directions based on the hex structure of the RC-Base abutment. Try to position the direction of the screw hole on the lingual side. For the accurate prosthetic work, take a photo of the screw hole direction at this time, or use the anti-rotation structure of the post to remember the direction.

CAD Order Sheet and Library Selection

After running the CAD (exocad, 3Shape) program, create an order sheet for the design work. While the order sheet format will differ according to the program (exocad, 3Shape), a screw-retained crown is the normal selection.

Select the RC-Base library that matches the cuff height and angulation determined at the Try-In.

Download and install the exocad or 3Shape library from the MedTEOR website or R2GATE website. CAD works well with the 2019 version or a later version.

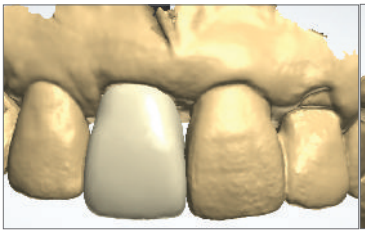


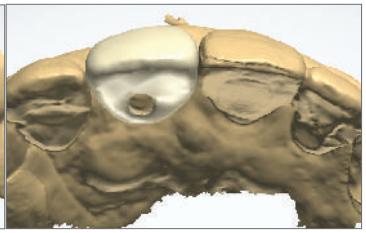
Matching

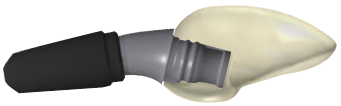
After importing the scan data, start the normal matching process. As matching references, use the flat surface of the Scan Abutment and flat surface of the Scan Abutment in the scan data.

After matching, check the degree of precision using the recommended function in respective CAD software.

RC-Base Abutment™

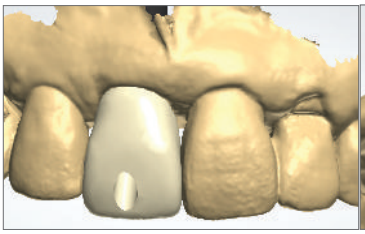


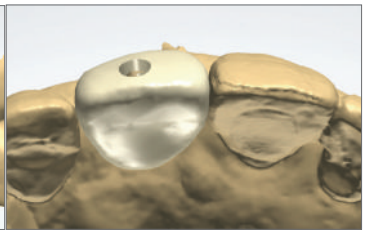




For the same anterior case, the screw hole designed for the RC-Base abutment™ is located on the lingual side, which results in an aesthetic and clean look on the labial surface.

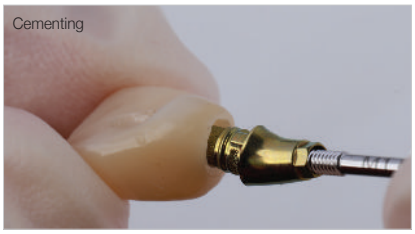
Conventional Ti-base Abutment



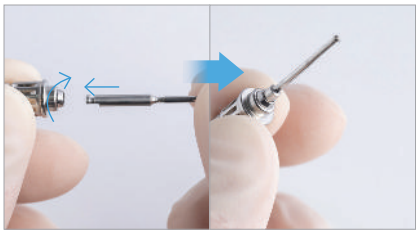


For the same anterior case, the screw hole designed for a regular Ti-base abutment is located on the labial side, which makes it difficult to ensure a good aesthetic result.

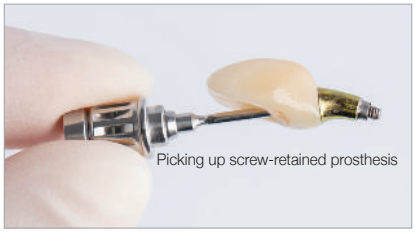
Sintering Zirconia
Sinter the finished zirconia crown according to the recommendations for the zirconia block. Post-process as normal and dye, if required.



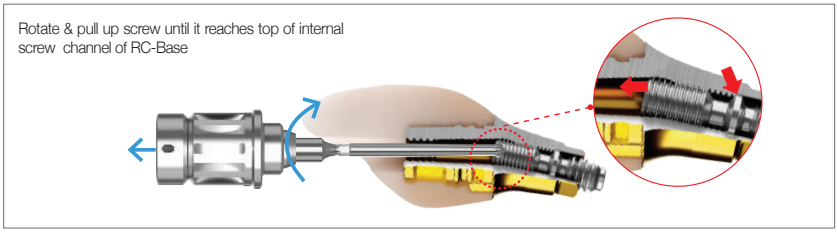
Cement Bonding - Prosthesis & RC-Base
Before cementing, combine the prosthesis and RC-Base and check the gap. Rework if the prosthesis is not properly coupled or it rotates due to excessive clearance.
According to the cement manufacturer's instructions, apply the recommended amount of cement to the post of the RC-Base, then slowly attach it to the prosthesis. Remove any excess cement overflow using a sculpting tool. To complete, light-cure or self-cure according to the cement manufacturer's instructions.



Assembly using Screw Driver
To fasten the prosthesis, connect the Right Angle Adapter to the Screw Driver or just use a Right Angle Driver.



Picking up the Prosthesis
Pick up the prosthesis by connecting the Screw Driver to the DP Screw™.



Initialize Position of DP Screw™
To fasten the RC-Base to the fixture, rotate and pull up the DP Screw™ in a counter clockwise direction until the stopper of the DP Screw™ touches the lower part of the inner thread of the RC-Base.
※ Although the position of the DP Screw™ of the RC-Base is set at the top, it can move during the delivery stage or for other reasons. So, be sure to check the position of the DP Screw™ to achieve a complete connection with the fixture.

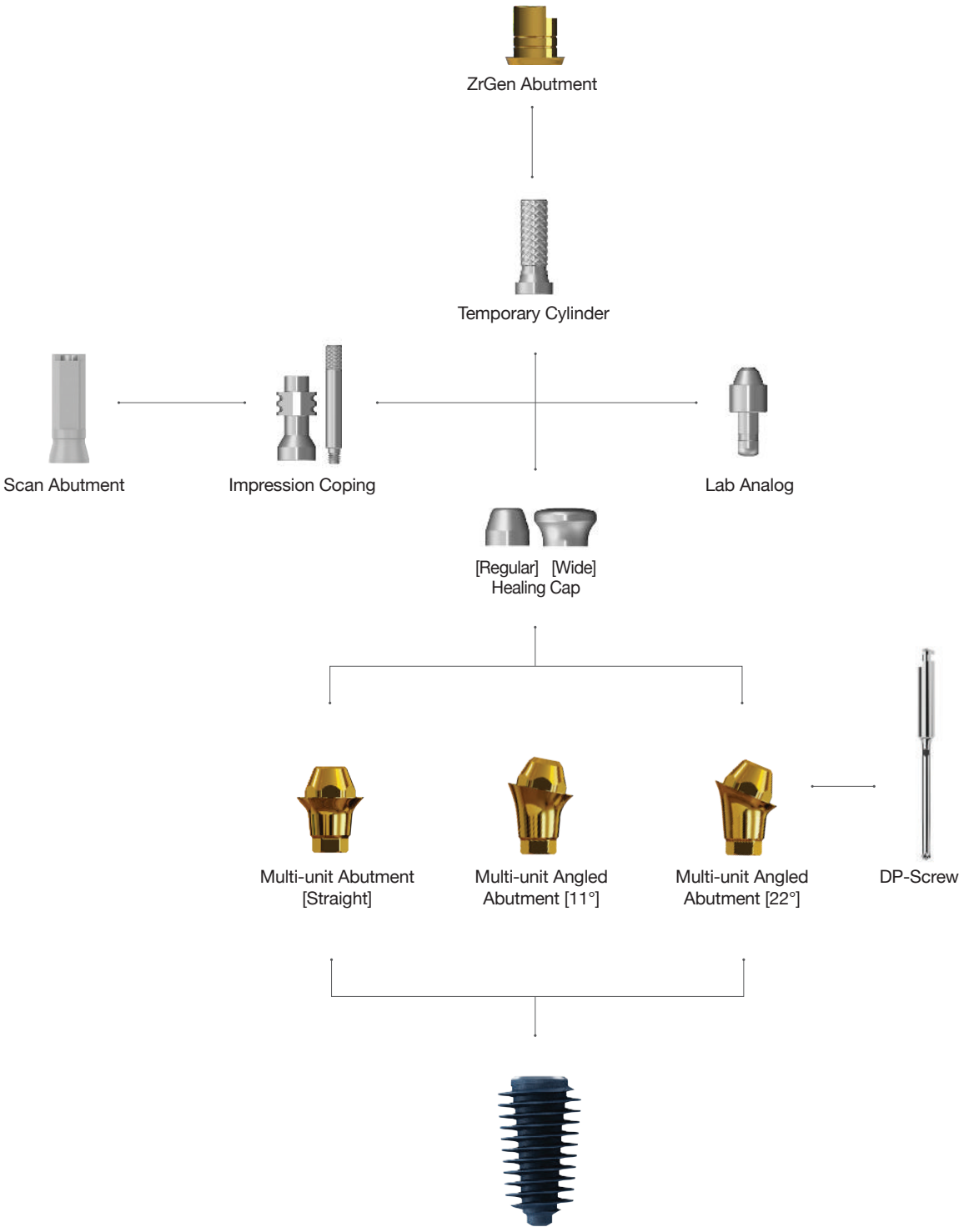
Transport of Prosthesis
Move the prosthesis using the Screw Driver.

Delivery of Prosthesis
According to the connection direction of the fixture and the adjacent teeth, turn the DP Screw™ in a clockwise direction to fasten the prosthesis to the the fixture.
※ If it feels too tight initially, this is probably because the DP Screw™ is in contact with the internal thread of the RC-Base when fastening the RC-Base to the fixture. No problem, just rotate in a clockwise direction to release the stress.
※ Recommended torque: 25N(0°/11°)/ 15N(22°)

Final prosthesis is complete, and since the screw hole is on the lingual side, this creates a better aesthetic result.

NEW

Multi-unit Abutment & Components
(All-on-4) (D.P_System)



CE

Coming Soon

Multi-unit Abutment

Multi-unit Abutment (Straight)

- MEDTEOR DP-Screw(MTO-D2T5-60)

- Recommended tightening torque: 25Ncm
- Use with Screw Driver(MTO-DIT5-FW)

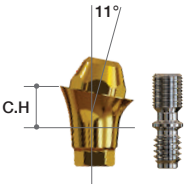
Cuff Height (Labial) (mm)	Ref.C
1.5 (1.6)	MA35-M0015
2.5 (2.6)	MA35-M0025
3.5 (3.6)	MA35-M0035
4.5 (4.6)	MA35-M0045

Multi-unit Angled Abutment (11°)

- MEDTEOR DP-Screw(MTO-D2T5-60)

- Recommended tightening torque: 25Ncm
- Use with Screw Driver(MTO-DIT5-FW)

Cuff Height (Labial/Lingual) (mm)	Ref.C
2.5 (2.75/1.8)	MA35-M1125
3.5 (3.7/ 2.8)	MA35-M1135
4.5 (4.7/ 3.8)	MA35-M1145

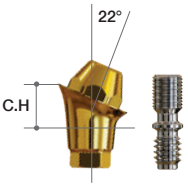


Multi-unit Angled Abutment (22°)

- MEDTEOR DP-Screw(MTO-D2T5-60)

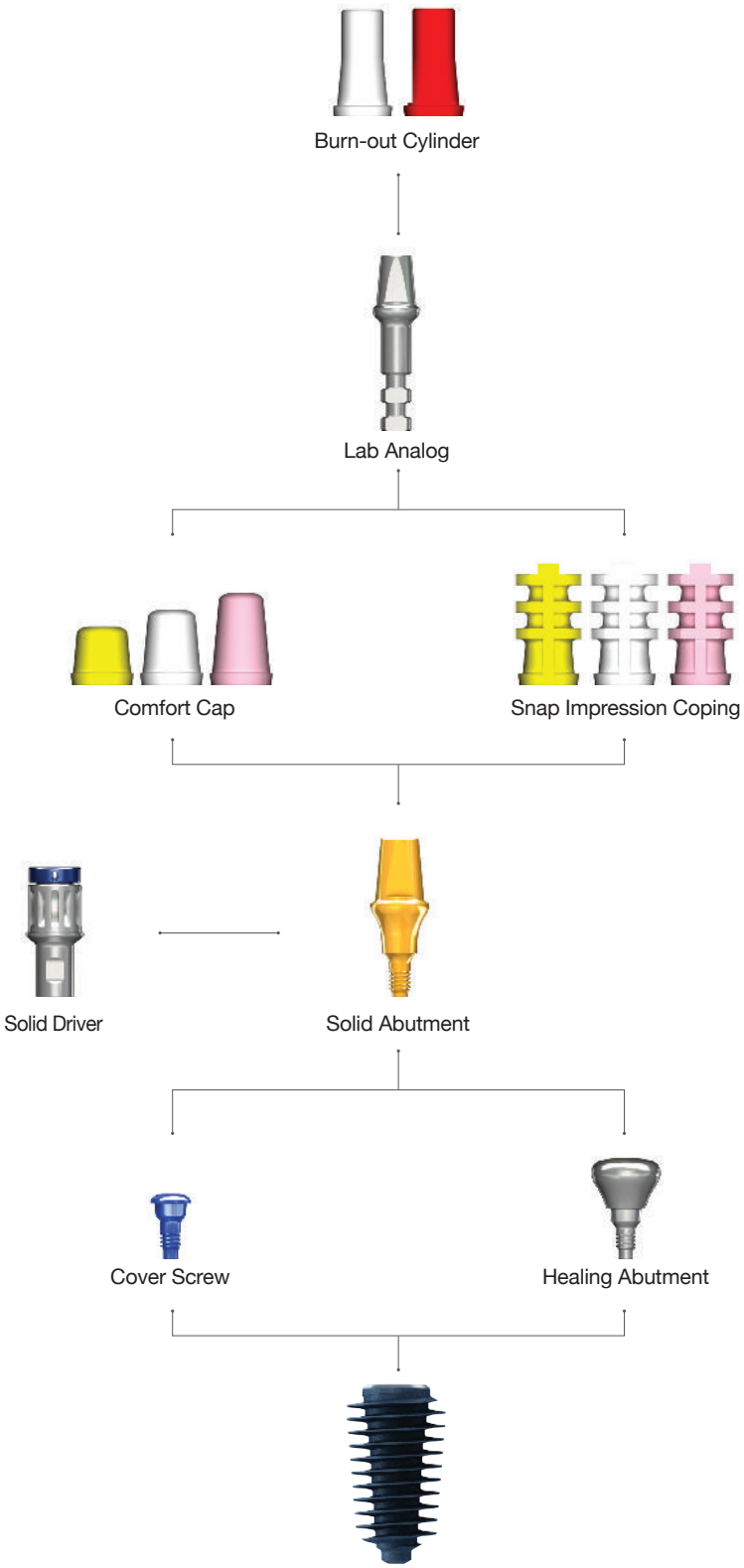
- Recommended tightening torque: 25Ncm
- Use with Screw Driver(MTO-DIT5-FW)

Cuff Height (Labial/Lingual) (mm)	Ref.C
2.5 (3.0/1.2)	MA35-M2225
3.5 (3.9/2.1)	MA35-M2235
4.5 (4.95/3.15)	MA35-M2245



II. Abutment Level Prosthesis

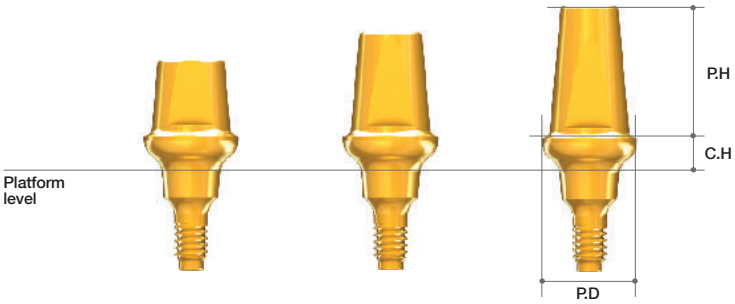
1. Solid Abutment & Components



➲ Solid Abutment Option

Solid Abutment

- Used in cement retained restoration only.
- Solid Abutment should be placed into patient's mouth before taking impression.
- Onebody (screw + abutment)
- Should be tightened with a Solid Driver and a Torque Wrench : 35Ncm
- Four different profile diameters. (Ø4.0/5.0/6.0/7.0)
  - Should be tightened with special Solid Driver.
  - Wider profile has bigger post angulation.
  (4mm - 8°, 5mm - 10°, 6mm - 12°, 7mm - 14°)
- Four different cuff heights. (2/3/4/5mm)
- Three different post heights. (4/5.5/7mm)
- Recommend torque : 35Ncm



Profile Diameter	Cuff Height(mm)	Post Height(mm)	Ref.C
Ø4.0	2	4	AANSAL4024
	3		AANSAL4034
	4		AANSAL4044
	5		AANSAL4054
	2	5.5	AANSAL4025
	3		AANSAL4035
	4		AANSAL4045
	5		AANSAL4055
	2	7	AANSAL4027
	3		AANSAL4037
	4		AANSAL4047
	5		AANSAL4057
Ø5.0	2	4	AANSAL5024
	3		AANSAL5034
	4		AANSAL5044
	5		AANSAL5054
	2	5.5	AANSAL5025
	3		AANSAL5035
	4		AANSAL5045
	5		AANSAL5055
	2	7	AANSAL5027
	3		AANSAL5037
	4		AANSAL5047
	5		AANSAL5057

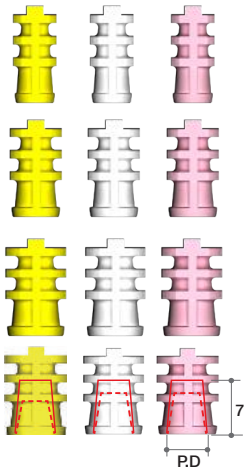
Profile Diameter	Cuff Height(mm)	Post Height(mm)	Ref.C
Ø6.0	2	4	AANSAL6024
	3		AANSAL6034
	4		AANSAL6044
	5		AANSAL6054
	2	5.5	AANSAL6025
	3		AANSAL6035
	4		AANSAL6045
	5		AANSAL6055
	2	7	AANSAL6027
	3		AANSAL6037
	4		AANSAL6047
	5		AANSAL6057
Ø7.0	2	4	AANSAL7024
	3		AANSAL7034
	4		AANSAL7044
	5		AANSAL7054
	2	5.5	AANSAL7025
	3		AANSAL7035
	4		AANSAL7045
	5		AANSAL7055
	2	7	AANSAL7027
	3		AANSAL7037
	4		AANSAL7047
	5		AANSAL7057

➲ Components for Solid Abutment

Snap Impression Coping

- For impression on Solid Abutments.
- 3 colors for different post heights.
- 4 different diameters for profile diameters. (Ø4, 5, 6, 7)
- Do not use when abutment is trimmed.

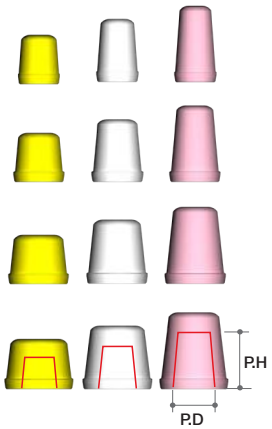
Profile Diameter	Ref.C
Ø4.0	AANSIF440
	AANSIF455
	AANSIF470
Ø5.0	AANSIF540
	AANSIF555
	AANSIF570
Ø6.0	AANSIF640
	AANSIF655
	AANSIF670
Ø7.0	AANSIF740
	AANSIF755
	AANSIF770



Comfort Cap

- Protects the Solid Abutment and minimizes irritation to tongue and oral mucosa.
- Can be applied under temporary prosthetics.
- Color coded according to post heights.

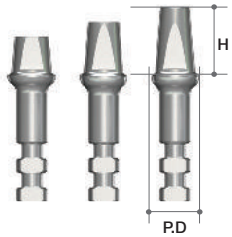
Profile Diameter	Post Height(mm)	Ref.C
Ø4.0	4	AANCCF440
	5.5	AANCCF455
	7	AANCCF470
Ø5.0	4	AANCCF540
	5.5	AANCCF555
	7	AANCCF570
Ø6.0	4	AANCCF640
	5.5	AANCCF655
	7	AANCCF670
Ø7.0	4	AANCCF740
	5.5	AANCCF755
	7	AANCCF770



Lab Analog

- Directly connected to the Snap Impression Coping in the impression to make a stone model.

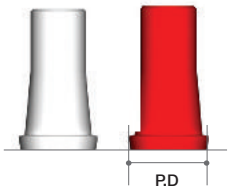
Profile Diameter	Height(mm)	Ref.C
Ø4.0	4	AANSLF440
	5.5	AANSLF455
	7	AANSLF470
Ø5.0	4	AANSLF540
	5.5	AANSLF555
	7	AANSLF570
Ø6.0	4	AANSLF640
	5.5	AANSLF655
	7	AANSLF670
Ø7.0	4	AANSLF740
	5.5	AANSLF755
	7	AANSLF770



Burn-out Cylinder

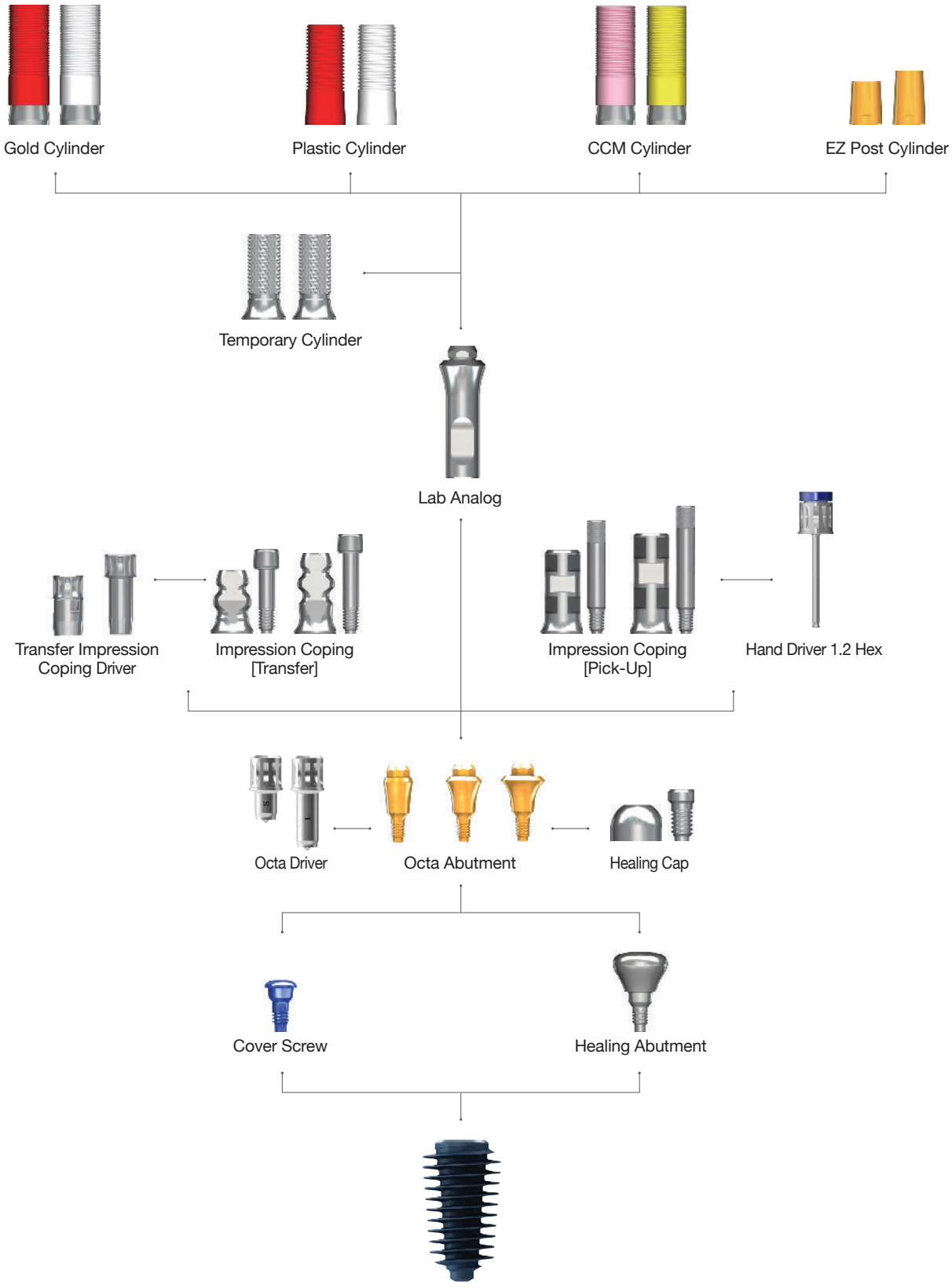
- Fits with a Lab Analog(Solid Abutment).
- Easy to wax-up and accurate casting.
- White Cylinder for multiple unit.
- Red Cylinder for single crown.

Profile Diameter	Type	Ref.C
Ø4.0	Multiple	AANBCB470
Ø5.0		AANBCB570
Ø6.0		AANBCB670
Ø7.0		AANBCB770
Ø4.0	Single	AANBCS470
Ø5.0		AANBCS570
Ø6.0		AANBCS670
Ø7.0		AANBCS770



II. Abutment Level Prosthesis

2. Octa Abutment & Components

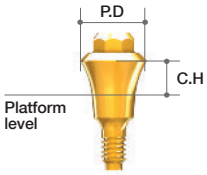


Components for Octa Abutment (Continued)

Octa Abutment

- Used in manufacturing multiple screw-retained prosthetics.
- Recommend torque : 35Ncm

Profile Diameter	Cuff Height (mm)	Ref.C
Ø3.8	1	AANOAF4010
	2	AANOAF4020
	3	AANOAF4030
	4	AANOAF4040
	5	AANOAF4050
Ø4.8	1	AANOAF0010
	2	AANOAF0020
	3	AANOAF0030
	4	AANOAF0040
	5	AANOAF0050
Ø5.8	1	AANOAF6010
	2	AANOAF6020
	3	AANOAF6030
	4	AANOAF6040
	5	AANOAF6050



Healing Cap

- Cylinder Screw(IRCS200) included.

- Protects Octa Abutment and minimizes irritation to tongue and oral mucosa.

Profile Diameter	Ref.C
Ø4.0	AANOHC4000T
Ø5.0	IHC400T
Ø6.0	AANOHC6000T

➲ Components for Octa Abutment (Continued)

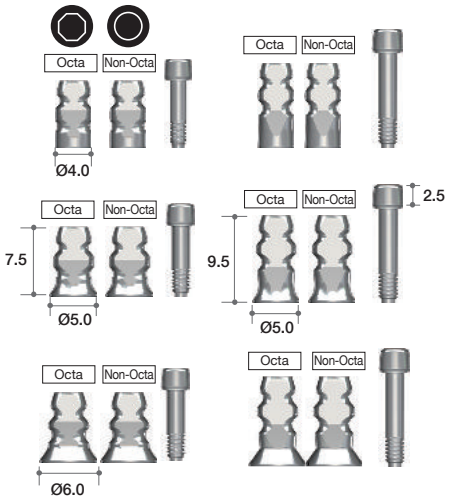
Impression Coping

(Transfer)

- Guide Pin(AAOTGP10 / AAOTGP12) included.

• Should be tightened with Impression Coping Driver (Page.394)

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	7.5	Octa	AAOITO4010T
		Non-Octa	AAOITN4010T
	9.5	Octa	AAOITO4012T
		Non-Octa	AAOITN4012T
Ø5.0	7.5	Octa	AAOITO5010T
		Non-Octa	AAOITN5010T
	9.5	Octa	AAOITO5012T
		Non-Octa	AAOITN5012T
Ø6.0	7.5	Octa	AAOITO6010T
		Non-Octa	AAOITN6010T
	9.5	Octa	AAOITO6012T
		Non-Octa	AAOITN6012T

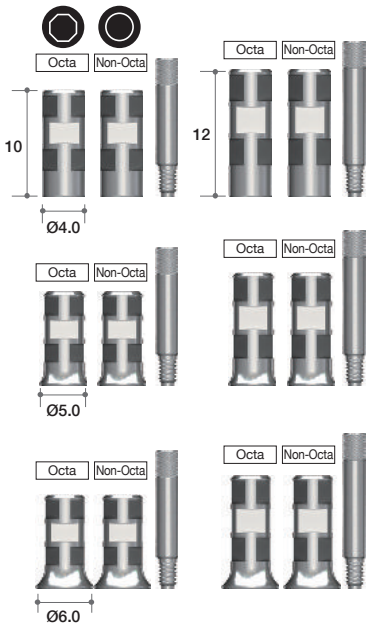


Impression Coping

(Pick-Up)

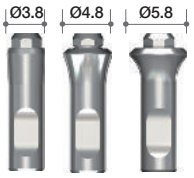
- Guide Pin(AAOPGP10 / AAOPGP12) included.

Profile Diameter	Height (mm)	Type	Ref.C
Ø4.0	10.0	Octa	AAOIPO4010T
		Non-Octa	AAOIPN4010T
	12.0	Octa	AAOIPO4012T
		Non-Octa	AAOIPN4012T
Ø5.0	10.0	Octa	AAOIPO5010T
		Non-Octa	AAOIPN5010T
	12.0	Octa	AAOIPO5012T
		Non-Octa	AAOIPN5012T
Ø6.0	10.0	Octa	AAOIPO6010T
		Non-Octa	AAOIPN6010T
	12.0	Octa	AAOIPO6012T
		Non-Octa	AAOIPN6012T



Lab Analog

Profile Diameter	Ref.C
Ø3.8	AANOLA4000
Ø4.8	IOA300
Ø5.8	AANOLA6000

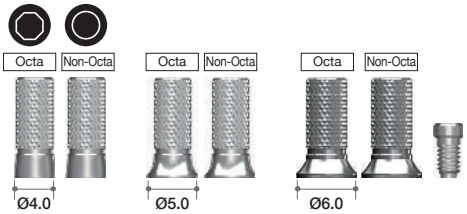


Temporary Cylinder

- Cylinder Screw(IRCS200) included.

• Recommend torque : 25Ncm

Profile Diameter	Type	Ref.C
Ø4.0	Octa	AANOTCO4010T
	Non-Octa	AANOTCN4010T
Ø5.0	Octa	AANOTCO5010T
	Non-Octa	AANOTCN5010T
Ø6.0	Octa	AANOTCO6010T
	Non-Octa	AANOTCN6010T

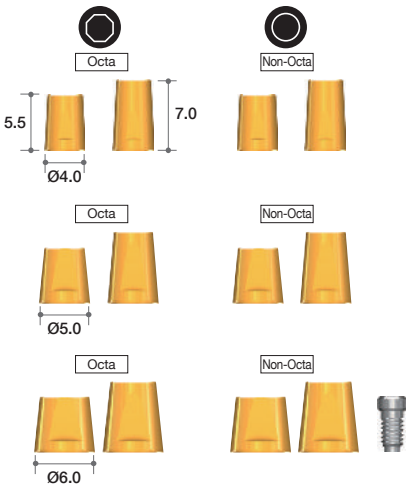


EZ Post Cylinder

- Cylinder Screw(IRCS200) included.

• Recommend torque : 35Ncm

Profile Diameter	Post Height(mm)	Type	Ref.C
Ø4.0	5.5	Octa	AAOECO4005T
	7.0		AAOECO4007T
	5.5	Non-Octa	AAOECN4005T
	7.0		AAOECN4007T
Ø5.0	5.5	Octa	AAOECO5005T
	7.0		AAOECO5007T
	5.5	Non-Octa	AAOECN5005T
	7.0		AAOECN5007T
Ø6.0	5.5	Octa	AAOECO6005T
	7.0		AAOECO6007T
	5.5	Non-Octa	AAOECN6005T
	7.0		AAOECN6007T



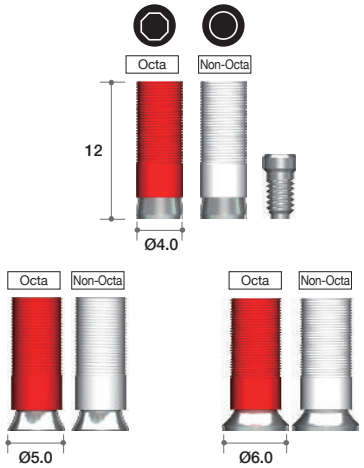
Components for Octa Abutment

Gold Cylinder

- Cylinder Screw(IRCS200) included.

- For customizing abutment for screw retained multi-unit restoration.
- Available in both octa(red) and non-octa(white).
- Melting point of gold alloy : 1063°C
- Threaded sleeves allow better retention of resin or wax.
- Available in three diameters (Ø4.0, 5.0, 6.0).
- Recommend torque : 30Ncm

Profile Diameter	Type	Ref.C
Ø4.0	Octa	AANGCO4000T
	Non-Octa	AANGCN4000T
Ø5.0	Octa	IOGO100T
	Non-Octa	IOGN100T
Ø6.0	Octa	AANGCO6000T
	Non-Octa	AANGCN6000T

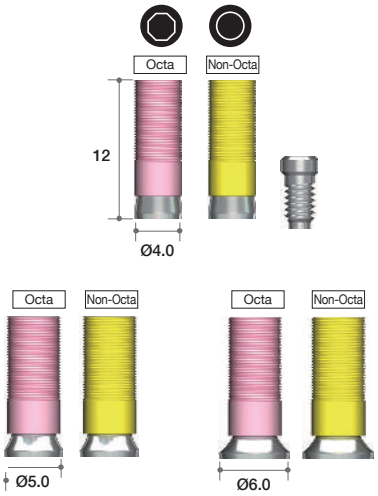


CCM Cylinder

- Cylinder Screw(IRCS200) included.

- Threaded sleeves allow a better retention of resin or wax.
- Available in both octa (pink) and non-octa (yellow) and three diameters (Ø4.0, 5.0, 6.0).
- Recommend torque : 30Ncm
- Melting temperature of CCM : 1300~1400°C
- Can be casted with non-precious alloys (Ni-Cr, Cr-Co alloys).

Profile Diameter	Type	Ref.C
Ø4.0	Octa	AANCCO4000T
	Non-Octa	AANCCN4000T
Ø5.0	Octa	AANCCO5000T
	Non-Octa	AANCCN5000T
Ø6.0	Octa	AANCCO6000T
	Non-Octa	AANCCN6000T

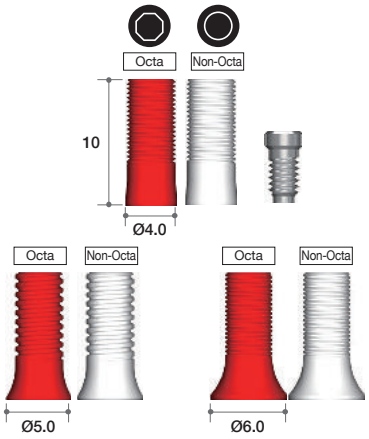


Plastic Cylinder

- Cylinder Screw(IRCS200) included.

- Economical option.
- Used for customizing abutment a screw retained multi-unit restorations.
- Available in both octa (red) and non-octa (white)
- Threaded sleeves allow a better retention of resin or wax.
- Recommend torque : 25Ncm

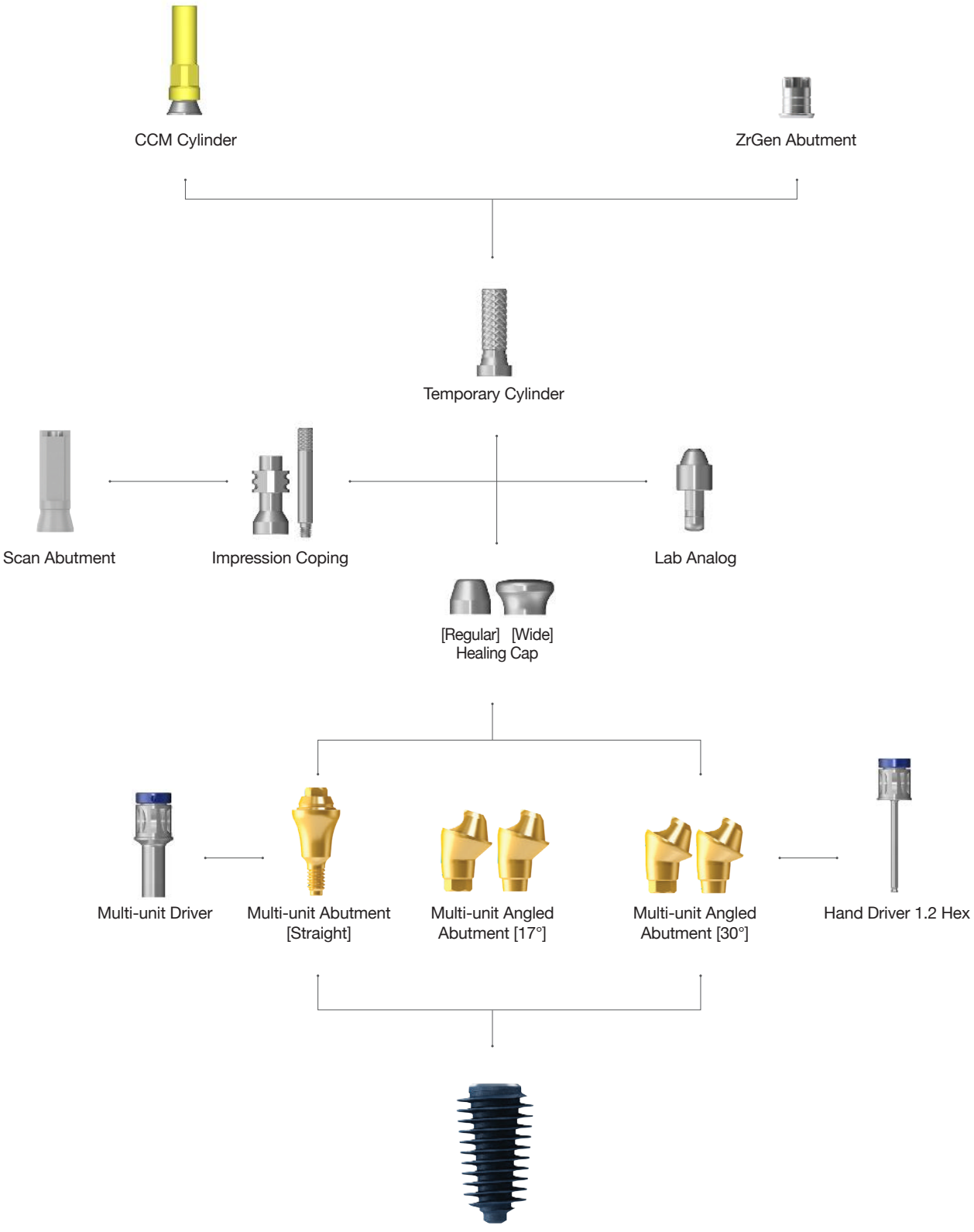
Profile Diameter	Type	Ref.C
Ø4.0	Octa	AAOTCO4010T
	Non-Octa	AAOTCN4010T
Ø5.0	Octa	IOPH100T
	Non-Octa	IOPN100T
Ø6.0	Octa	AAOTCO6010T
	Non-Octa	AAOTCN6010T



II. Abutment Level Prosthesis

3-1. Multi-unit Abutment & Components

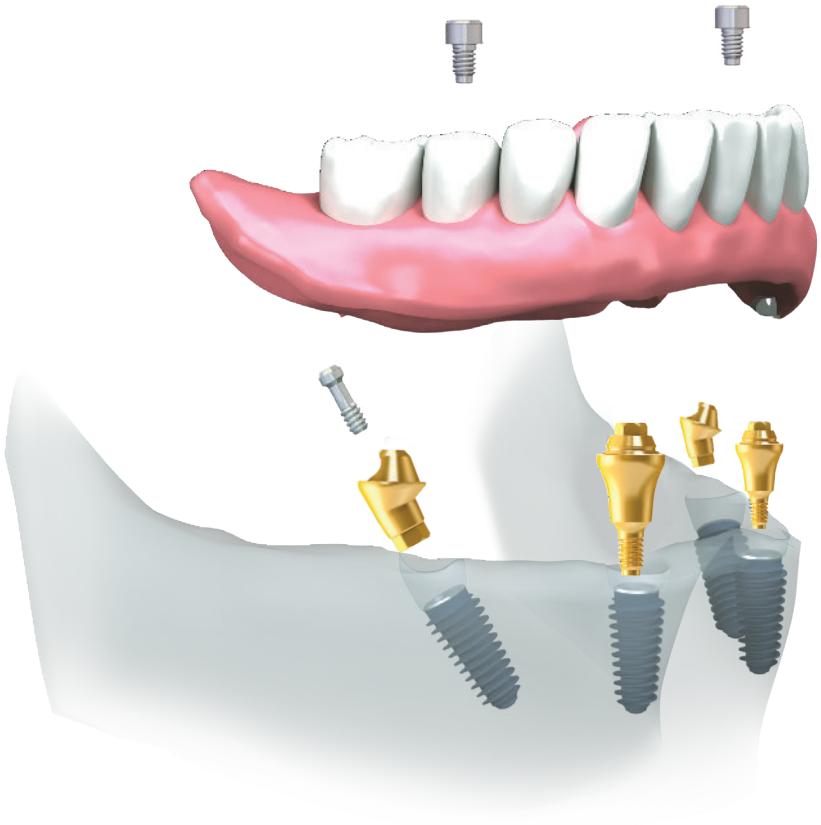
(All-on-4) (N_Type)



▸▸ Multi-unit Abutment™

Multi-unit Abutment Design Concept

MegaGen Implant develops the special abutment named as Multi-unit Abutment, which can be the solution for the edentulous patients. With 4 fixtures placed into patient's ridge and a hybrid denture on those four fixtures, a patient can recover his or her dental condition almost completely. In most cases, Multi-unit Abutments work in a set of 2 x straight type abutment for anterior position and 2 x angled type abutment on posterior position.



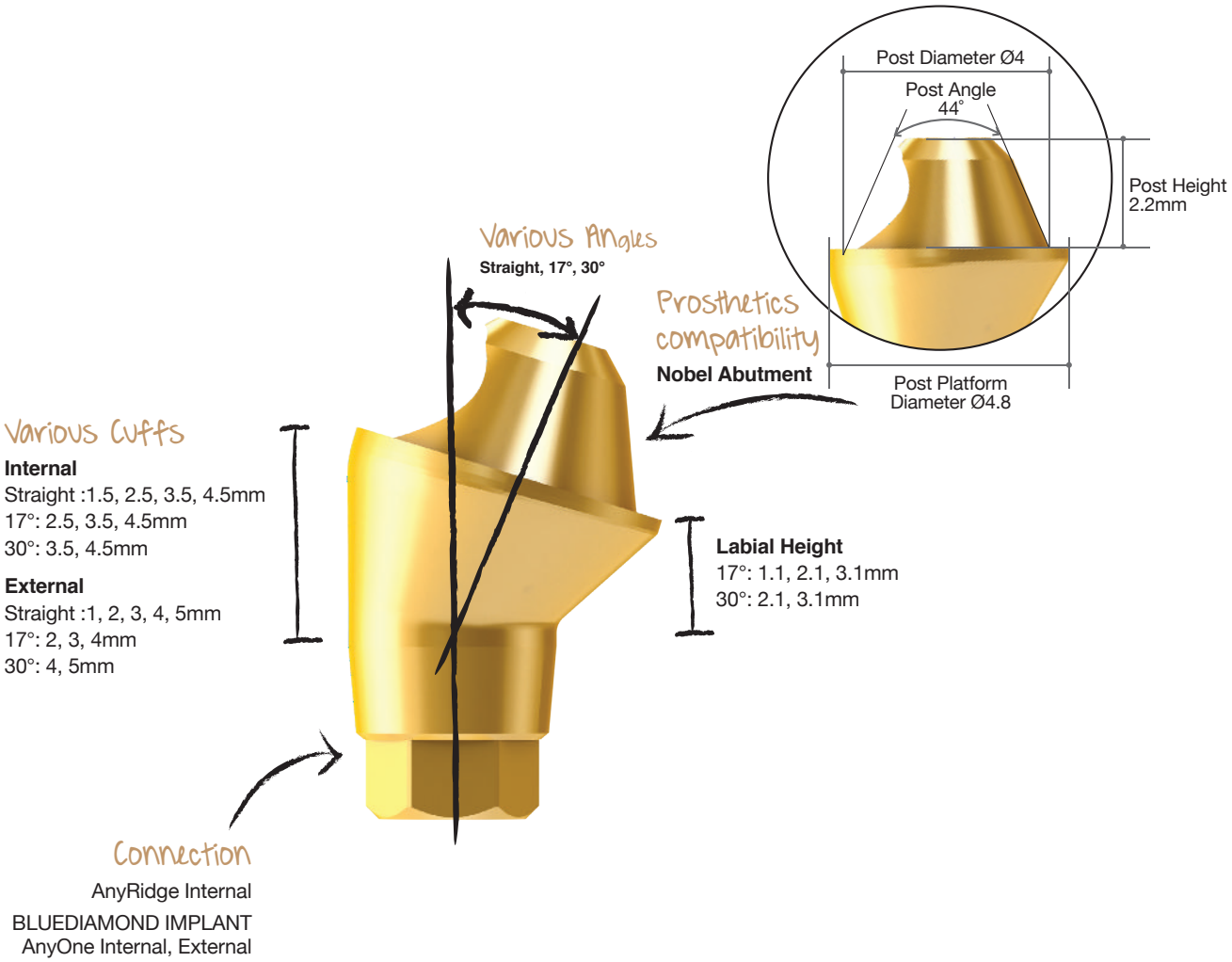
Features

You could see how Multi-unit Abutment functions and what benefits you could get from Multi-unit Abutment are as the followings:

- 2 fixtures which are slantly implanted on posterior position are osseointegrated with cancellous bone. These fixtures function as dispersing vertical load on alveolar bone.
- Multi-unit Abutment is only 4 fixtures + 4 abutments. It means that dental surgeon has enough places for surgery. Therefore, it will be easy to find and place 4 fixtures into ridge where abundant cancellous bone exists.
- A doctor can use graft bone material if a patient dosen't have enough alveolar bone. However, the slantly placed fixtures can overcome the patient's insufficient bone by getting good holding strength with this angulation.
- In addition, these angulated fixtures can avoid touching important anatomies, such as mandibular nerve and maxillary sinus.
- All on 4 technique is also possible to do guided surgery using R2GATE Guide with a diagnosis from R2GATE.

▸▸ Multi-unit Abutment N Type

The solution for the edentulous patients



Benefit

1. Easy and economical treatment solution for compromised edentulous cases.
2. Expensive and time consuming bone graft may not be necessary.
3. Multiple angles (0˚, 17˚, 30˚) support different implant insertion paths.
4. Universally compatible with other Multi-unit systems.

Available Implant System

- AnyRidge Internal
- BLUEDIAMOND implant
- AnyOne Internal
- AnyOne External

Compatibility with others' Multi-unit level prosthetic components

✓ **Post Height**
✓ **Post Diameter**
✓ **Post Angle**
✓ **Abutment Angle**
✓ **Cuff Height**

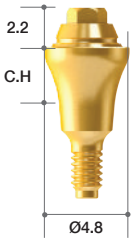
Multi-unit Abutment

Multi-unit Abutment [AR] - Straight

- MUA Straight Carrier (MUASC) included

• Recommend torque : 35Ncm

Cuff Height (mm)	Type	Ref.C
1.5	1-piece (M1.8)	MUAARN0015C
2.5		MUAARN0025C
3.5		MUAARN0035C
4.5		MUAARN0045C

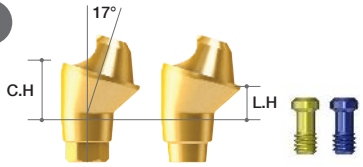


Multi-unit Angled Abutment [AR] - 17°

- MUA Screw (MUAARS) included
- MUA Angled Carrier (MUAAC) included

• Recommend torque : 25Ncm

Cuff Height (Labial) (mm)	Type	Ref.C
2.5 (1.1)	Hex	MUAARH1725LC
3.5 (2.1)		MUAARH1735LC
4.5 (3.1)		MUAARH1745LC
2.5 (1.1)	Non-Hex	MUAARN1725LC
3.5 (2.1)		MUAARN1735LC
4.5 (3.1)		MUAARN1745LC

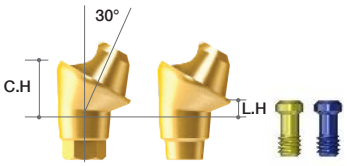


Multi-unit Angled Abutment [AR] - 30°

- MUA Screw (MUAARS) included
- MUA Angled Carrier (MUAAC) included

• Recommend torque : 25Ncm

Cuff Height (Labial) (mm)	Type	Ref.C
3.5 (1.1)	Hex	MUAARH3035LC
4.5 (2.1)		MUAARH3045LC
3.5 (1.1)	Non-Hex	MUAARN3035LC
4.5 (2.1)		MUAARN3045LC



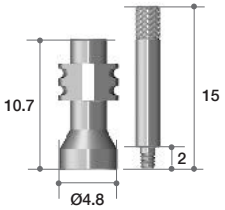
Components for Multi-unit Abutment (Continued)

Impression coping (Pick-up)

- Guide pin (MUAGP) included

• Use to take an impression at the abutment level.

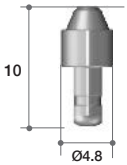
Connection	Ref.C
Non-Hex	MUAICT



Lab Analog

• Use to duplicate the Multi-unit abutment in the working model.
• Available to use as a RP Analog for 3D printed working model.

Head form	Ref.C
Multi-unit Abutment(Nobel)	MUALA

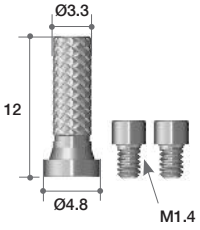


Temporary Cylinder

- Cylinder Screw (MUAS) 2EA included

• Use for fabricating acrylic provisional restoration.
• Grooves on the post cylinder allow storing resin adhension.
• Back-up screw is included.
• Recommend torque : 15Ncm

Connection	Ref.C
Non-Hex	MUATCL

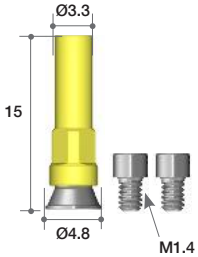


CCM Cylinder

- Cylinder Screw (MUAS) 2EA included

• Use for fabricating screw retained prostheses with metal reinforced or bar structured overdentures.
• Available to cast with non-precious dental alloys (Ni-Cr, Cr-Co alloys)
• Melting temperature of CCM base: 1300~1400°C
• Back-up screw is included.
• Recommend torque : 15Ncm

Connection	Ref.C
Non-Hex	MUACCML

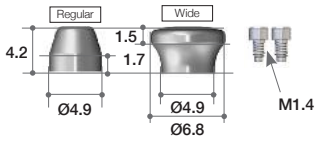


➲ Components for Multi-unit Abutment

Healing Cap

- Cylinder Screw (MUAS) 2ea included
- The size of healing cap can be selected depending on soft tissue volume or type of restorations.

Type	Ref.C
Regular	MUAHCL
Wide	MUAHCWL



Healing Cap Set Reference Code

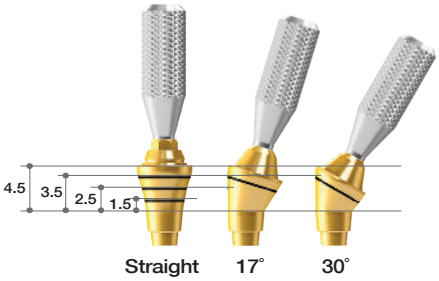
Order code : Available by changing to 'P' instead of 'L' from current Ref.C

Ex) MUAHCL → MUAHC**P**

Try-in Abutment

- Cuff height is indicated with laser markings
- Straight17°, 30°
- Non-hex type

Angle	Cuff Marking	Ref.C
Straight	1.5 / 2.5 / 3.5 / 4.5	MUTIAAR00C
17°	2.5 / 3.5 / 4.5	MUTIAAR17C
30°	3.5 / 4.5	MUTIAAR30C



Try-in Abutment Set reference code

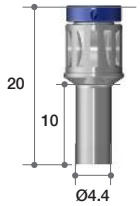
Order code : MUTIAAR00C**P**

※ Kit contains Straight, 17° and 30° type of Try-in Abutments (1 each)

Multi-unit Driver

- Use to torque straight type Multi-unit Abutments.
- Use with a torque wrench **(ref code: MTW300A)**

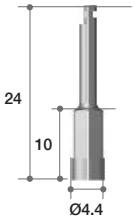
Hex	Length	Ref.C
2.0	10	MUD10



Right Angle Driver

- Use to torque straight type Multi-unit Abutments.
- Use with latch-type handpiece.
- Use with Meg-TORQ **(ref code: MEG_TORQ)**

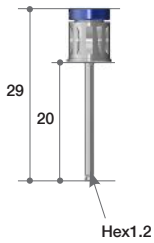
Hex	Length	Ref.C
2.0	10	MURAD10



Hand Driver

- Use for abutment screw with 1.2 hex hole.
- Use up to 15° divergent.
- It should use under 30Ncm torque.

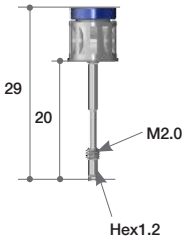
Hex	Length	Ref.C
1.2	20	MUHD1220



Removal Driver

- Use for abutment screw with 1.2 hex hole.
- Use up to 15° divergent.
- Exclusively for AnyRidge system.
- It should use under 30Ncm torque.

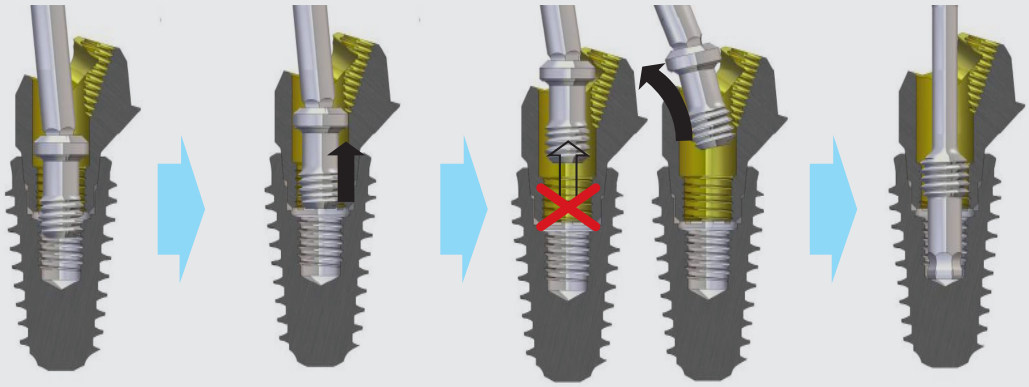
Hex	Length	Ref.C
1.2	20	MUARD20



▸▸ Screw & Abutment Tightening Torque Guide

- Abutment Screw (M1.8 & M2.0) : 25Ncm
- Cylinder Screw (M1.4) : 15Ncm
- Straight Abutment (M1.8 &M2.0) : 35Ncm

Instruction for removing abutment screw from Multi-unit abutment [Exclusively for AnyRidge system]



1. Completely unscrew abutment screw by rotating it counterclock wise (approximately 4 rotations are required). It should sue with a Hand Driver **(ref code: MUHD1220)**
2. Pull the Hand Driver up straight until it is visible through abutment crew hole. Shaking left and right may be required if the screw becomes stuck inside of the abutment hole.
3. Slightly rotate the screw to the main access hole. Otherwise the screw could fall back into the screw hole due to distur bance of abutment structure.
4. Remove abutment with the Removal Driver **(ref code: MUARD20)** by rotating it clockwise.

Driver Tightening Torque Guide

1. Multi-unit Abutment Remover Driver

< 30Ncm

2. Multi-unit Hand Driver

< 30Ncm

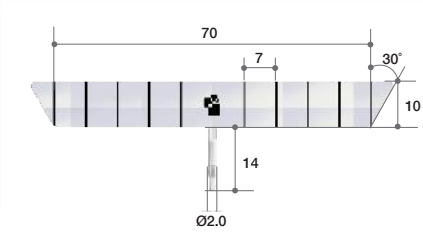
- Excessive torque more than 30Ncm may cause fracturing of the driver.
- Straight type Multi-unit abutment needs to use the Multi-unit Driver that is provided in the starting package. **(ref code: MUD10)**
- Strongly recommended to pick up the abutment screw by pressing the Hand Driver to remove the abutment screw from the Multi-unit abutment.

Components for Multi-unit Abutment

Surgical Guide

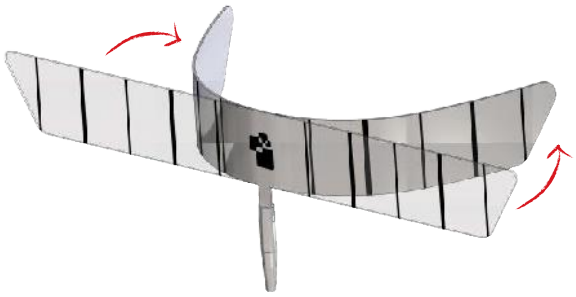
- The distance between the lines is 7mm
- Put center pin after initial drilling at the centric of arch. (Refer to the surgical protocol on page.126)

Angle	Marking Length (mm)	Ref.C
30°	7	MUSG70

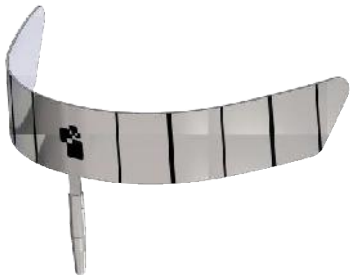


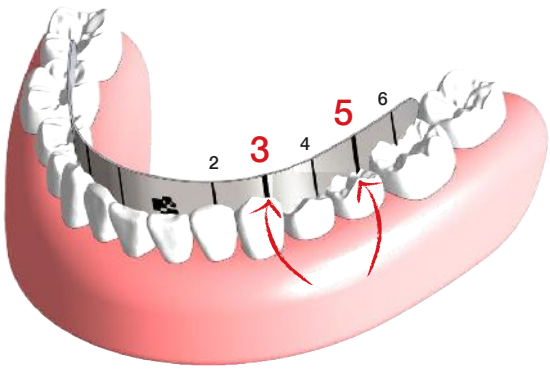
How to use Surgical Guide

※ As Canine and second premolar are most commonly used, the surgical guide has thicker lines for easier identification.
※ The surgical guide is able to use for first molar depending on surgical plan.



Bend to use





[Packing]

Multi-unit Abutment Set Contents

Multi-unit Abutment Healing cap type Set reference code

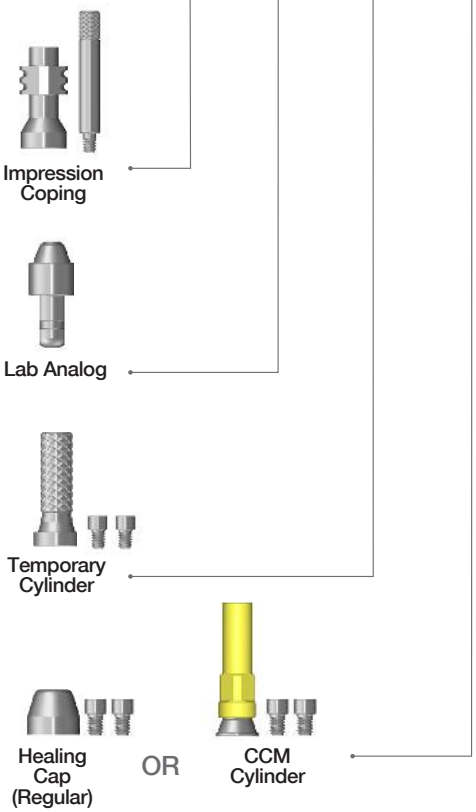
Order code : Available by changing to 'HP' instead of 'C' or 'LC' from current Ref.C

Ex) MUAARH1725LC → MUAARH1725 **HP**

Multi-unit Abutment CCM type Set reference code

Order code : Available by changing to 'P' instead of 'C' or 'LC' from current Ref.C

Ex) MUAARH1725LC → MUAARH1725 **P**



▸▸ Starting Package Contents

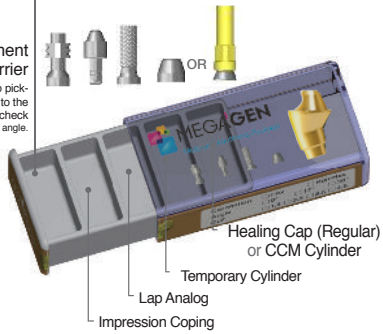
Type		Ref.C
Healing Cap	Hex	SKARHN3000H
	Non Hex	SKARNN3000H
CCM Abutment	Hex	SKARHN3000
	Non Hex	SKARNN3000

Straight 8set
(2set x 4kind of cuff)

Angle 17° 6set
(2set x 3kind of cuff)

Angle 30° 4set
(2set x 2kind of cuff)

Multi-unit Abutment with *carrier
* MUA carrier is used to pick-up an abutment to the patient's mouth, and check its insertion angle.



Surgical Instrument

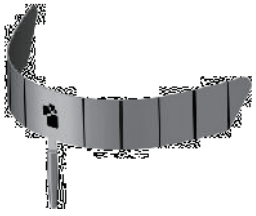
Multi-unit Driver | Right Angle Driver | Hand Driver | Removal Driver

Healing Cap 2set

Regular
Wide

Try-in Abutment 1set
(Straight, 17°, 30°each 1ea)

Surgical Guide 2ea

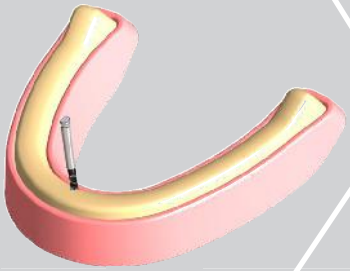


Surgical Protocol

Conventional Surgery

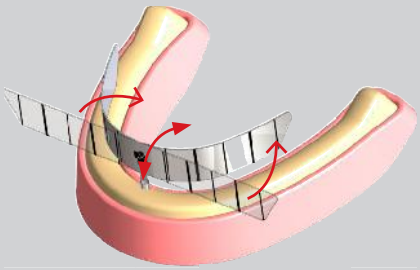
1. Initial drilling

For placement of center pin after initial drilling in the centric of the arch. The drilling hole should be in lingual area of the arch to ensure the best result.



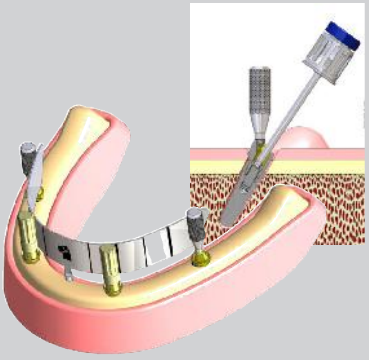
2. Guide Bending & Position

Bend according to the patient's arch.

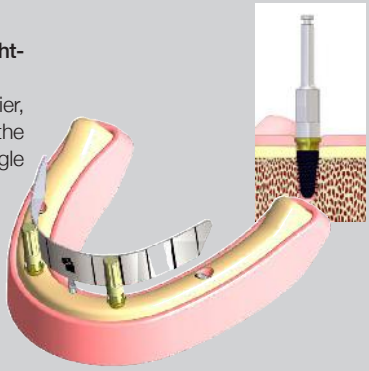


7. Tightening the Abutment

Abutment Screw tightening Torque : 25Ncm
After connecting Abutment Screw, remove Carrier from Abutment. For 17° abutment, you need to tighten it by tilting Driver about 5°. Connect Abutment and check the path using Carrier.

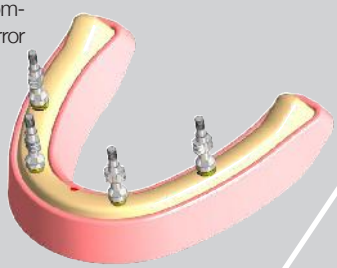


Straight Abutment tightening Torque : 35Ncm
After removing Carrier, connect Abutment to the Fixture using Right Angle Driver or MUA Driver.



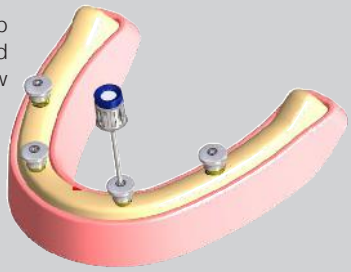
8. Impression

Take an impression with an individual tray. (Open tray method is strongly recommended to avoid any error in the future.)



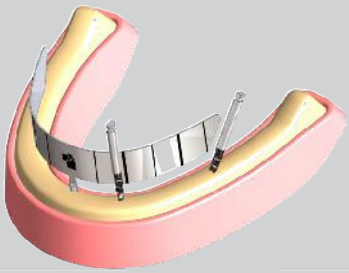
9. Healing Cap

Cylinder Screw tightening Torque : 15Ncm
Place Healing Cap on top of Multi-unit abutment, and connect Cylinder Screw with the Hand Driver.



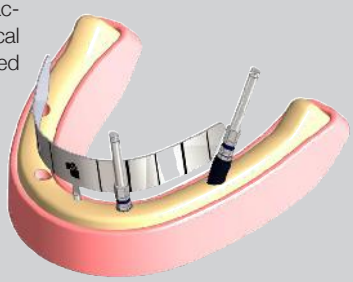
3. Drilling

Drill according to the surgical plan.



4. The fixture is implanted

Place implant fixtures according to the surgical plan and do not exceed torque value (60Ncm)

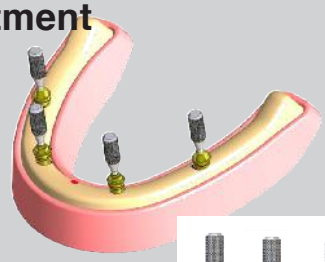


6. Abutment Selection

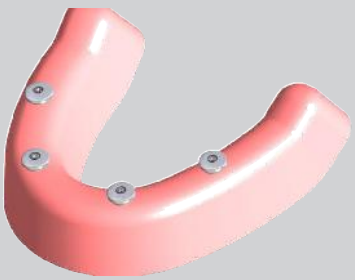
Select the appropriate set after checking the angulation and cuff height that were measured with the Try-in abutment. Connect the abutment onto the fixture and check the angulation and the cuff height.

5. Try-in Abutment

Using the laser marking on the Try-in abutment, select the appropriate cuff height and angulation of Multi-unit abutments.



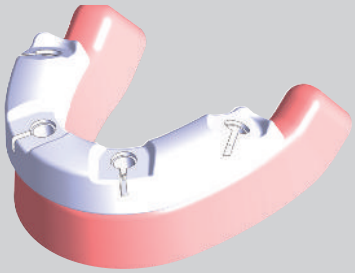
10. Suture



Surgical Protocol
Guided Surgery

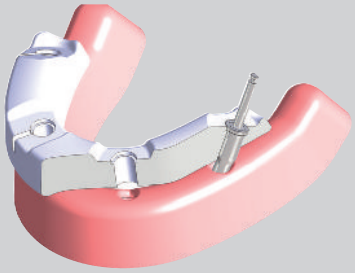
1. Guide

Place a R2 Guide.



2. Narrow Crest Drill

For the cases with narrow ridge or placing a fixture slanted on the lingual side, you can flatten the surface and drill stably without slipping

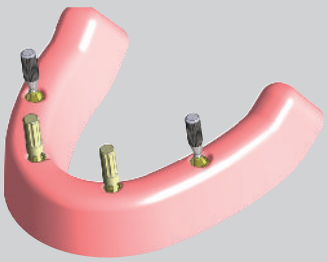


8. Setting Temporary and Denture

Reline the temporary denture with resin to fill the space around the Temporary Cylinder.

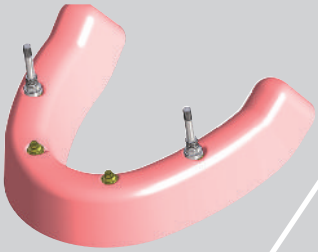
7. Connect Temporary Cylinder in the front

Connect the Temporary Cylinders in the front. Make sure that holes in the denture are free from any contact with the Temporary Cylinder. Adjust the holes until there is no contact between the denture and the Temporary Cylinder.
*If the Temporary Cylinder is fixed using Guide Pin, resin flow into access hole will be prevented.



9. Connect Temporary Cylinder in the back

Connect rest of the Temporary Cylinders in the back, make sure that the holes in the denture are free from any contact with the Temporary Cylinder. Adjust the holes until there is no contact between the denture and the Temporary Cylinder.

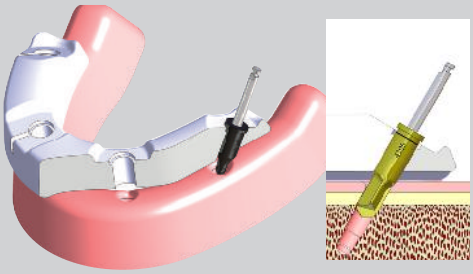


10. Setting Temporary and Denture

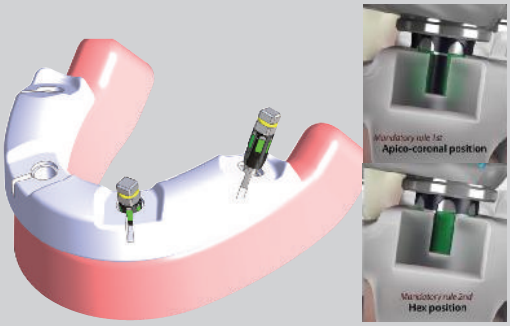
All temporary cylinders are picked up in the denture with resin.

3. Drilling

Drill according to the drilling sequence.

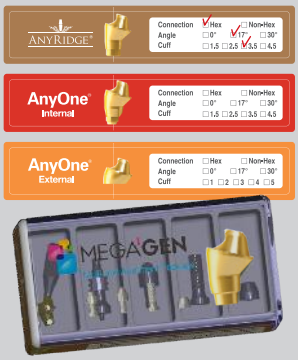


4. Fixture Placement



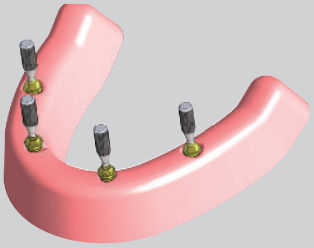
6. Abutment Selection

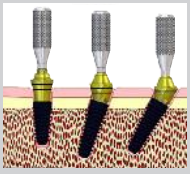
Select the appropriate set after checking the angulation and cuff height that were measured with the Try-in abutment. Connect the abutment onto the fixture and check the angulation and the cuff height.



5. Try-in Abutment

Using the laser marking on the Try-in abutment, select the appropriate cuff height and angulation of Multi-unit abutments.





11. Temporary Fixation

Remove Denture and fill up the bottom and other non-resin filled parts with resin and completely fix Temporary Cylinder.

12. Tighten the Denture

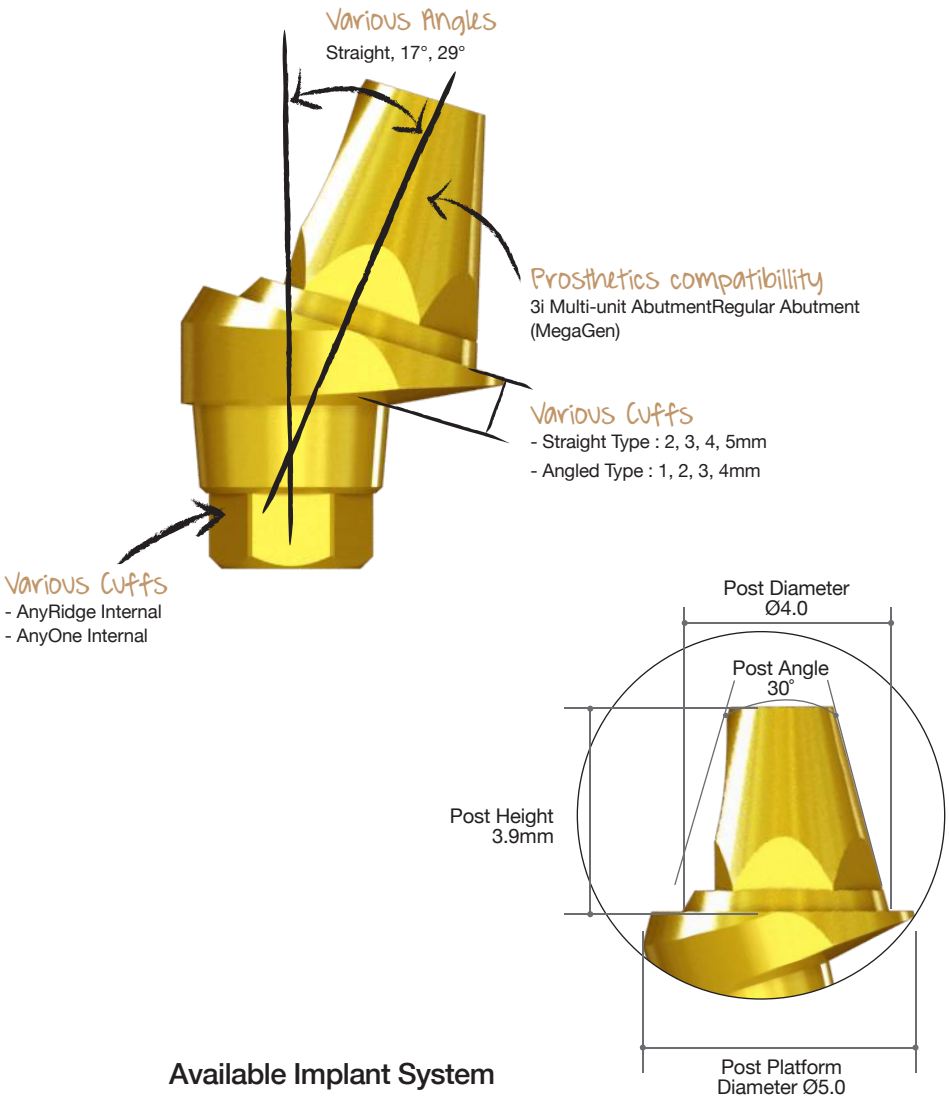
Cylinder Screw tightening Torque : 15Ncm
Set Denture onto Multi-unit Abutment and tighten cylinder

13. Finish

Close Hole using EZ Seal and finalize the surgery.

▸▸ Multi-unit Abutment S Type

The solution for the edentulous patients



Benefit

1. Retrievability means that doctor can change or retrieve the final prosthetics easily.

2. Two types of angulation : 17°, 29°. It means that doctor has various options to angle.

3. Various cuff heights (1~5mm) : Doctor can have flexiblily on the depth of fixture placement.

4. MegaGen's Multi-unit Abutment is perfectly compatible with the prosthetic components of Multi-unit Abutment of 3i implant, and Regular Abutment of MegaGen's Exfeel External system.

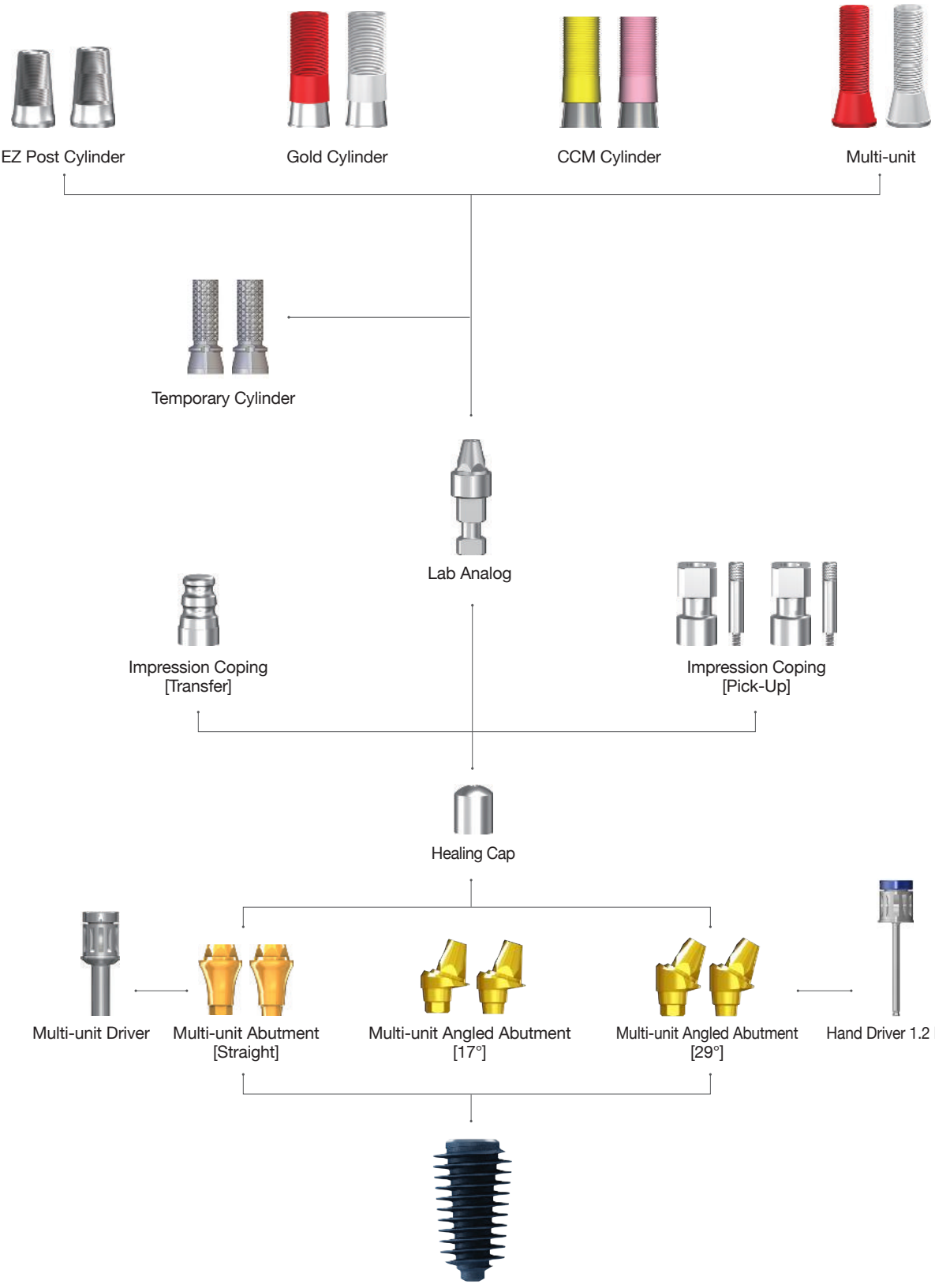
Available Implant System

- AnyRidge Internal
- AnyOne Internal

II. Abutment Level Prosthesis

3-2. Multi-unit Abutment & Components

(All-on-4) (S-Type)

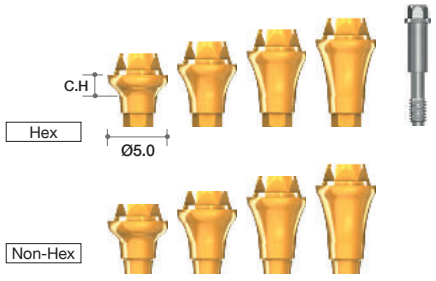


➲ Multi-unit Abutment

Multi-unit Abutment
(Straight)

- Multi-unit Abutment Screw(AANMUS20) included.
- Use with Multi-unit Driver.
  - TCMMUDS20 (short)
  - TCMMUDL20 (long)
- Recommend torque : 35Ncm

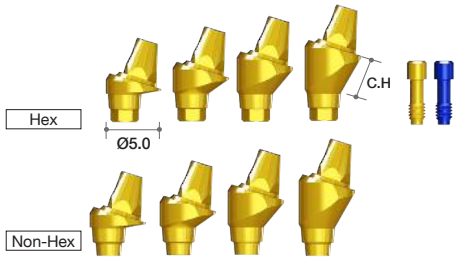
Cuff Height (mm)	Type	Ref.C
2.0	Hex	AANMUH5020T
3.0		AANMUH5030T
4.0		AANMUH5040T
5.0		AANMUH5050T
2.0	Non-Hex	AANMUN5020T
3.0		AANMUN5030T
4.0		AANMUN5040T
5.0		AANMUN5050T



Multi-unit Angled Abutment (17°)

- Multi Post Screw(MUMSF/MUMST) included.
- Recommend torque : 35Ncm

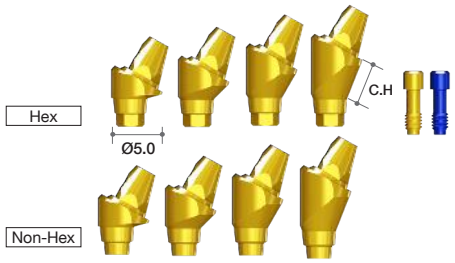
Cuff Height (mm)	Type	Ref.C
1.0	Hex	AANMUH50117L
2.0		AANMUH50217L
3.0		AANMUH50317L
4.0		AANMUH50417L
1.0	Non-Hex	AANMUN50117L
2.0		AANMUN50217L
3.0		AANMUN50317L
4.0		AANMUN50417L



Multi-unit Angled Abutment (29°)

- Multi Post Screw(MUMSF/MUMST) included.
- Recommend torque : 35Ncm

Cuff Height (mm)	Type	Ref.C
1.0	Hex	AANMUH50129L
2.0		AANMUH50229L
3.0		AANMUH50329L
4.0		AANMUH50429L
1.0	Non-Hex	AANMUN50129L
2.0		AANMUN50229L
3.0		AANMUN50329L
4.0		AANMUN50429L



Components for Multi-unit Abutment (Continued)

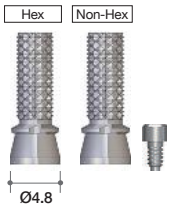
Lab Analog

Profile Diameter	Ref.C
Ø4.8	RELA300

Temporary Cylinder

- Cylinder Screw (TASH140) included
- Recommend torque : 15Ncm

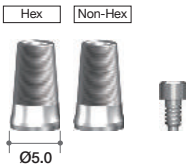
Profile Diameter	Type	Ref.C
Ø4.8	Hex	ETH100T
	Non-Hex	ETN100T



EZ Post Cylinder

- Cylinder Screw (TASH140) included
- Recommend torque : 15Ncm

Profile Diameter	Type	Ref.C
Ø5.0	Hex	RCA900T
	Non-Hex	RCA800T



Healing Cap

Profile Diameter	Ref.C
Ø5.0	REC600

Impression Coping
(Transfer)

Profile Diameter	Ref.C
Ø4.8	RITE480

Impression Coping
(Pick-Up)

- Guide Pin (RICG150) included

Height (mm)	Type	Ref.C
9.4	Hex	RIEH480T
	Non-Hex	RIEN480T

➲ Components for Multi-unit Abutment

Gold Cylinder

- Cylinder Screw (TASH140) included

- Useful to make a customized abutment in difficult situations.
- Precious and non-precious alloys.
- Melting point of gold alloy : 1063°C
- Threaded sleeves for convenient Resin / Wax-up.
- Recommend torque : 15Ncm

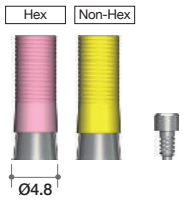
Profile Diameter	Sleeve Color	Ref.C
Ø5.0	Red	REGC200T
	White	REGC100T

CCM Cylinder

- Cylinder Screw (TASH140) included

- Useful to make a customized abutment in difficult situations.
- Can be casted with non-precious alloys (Ni-Cr, Cr-Co alloys).
- Non-precious melting temperature : Depends on Manufacturer
- Threaded sleeves for convenient Resin / Wax-up.
- Melting temperature of CCM : 1300~1400°C
- Recommend torque : 15Ncm

Profile Diameter	Sleeve Color	Ref.C
Ø4.8	Pink	RCA5013HT
	Yellow	RCA5013NT



Plastic Cylinder

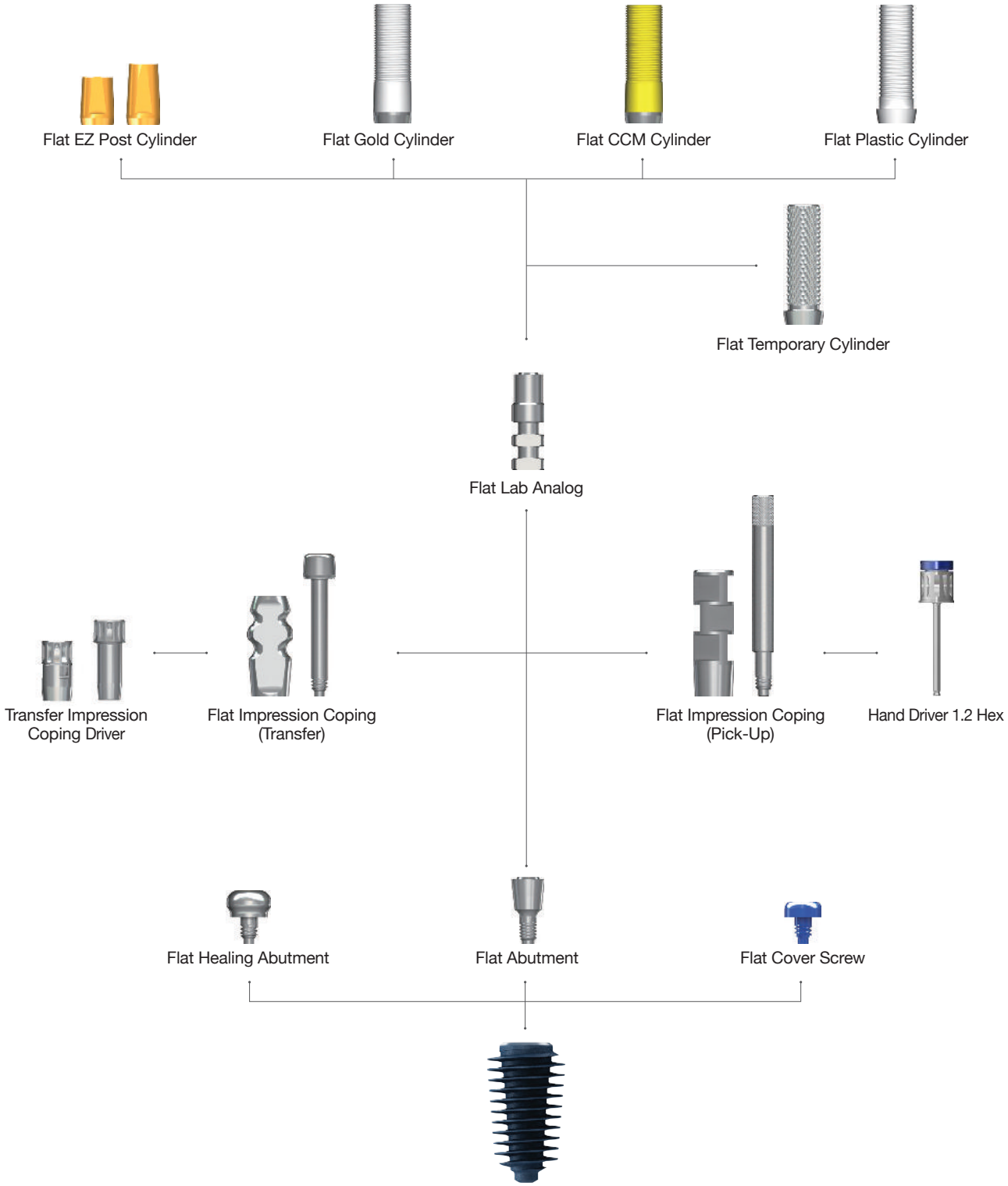
- Cylinder Screw (TASH140) included
- Recommend torque : 15Ncm

Profile Diameter	Sleeve Color	Ref.C
Ø5.2	Red	RPEH100T
	White	RPEN100T

II. Abutment Level Prosthesis

4. Flat Abutment & Components

: The main advantage of this Flat Abutment is the freedom on angulation.
Flat Abutment can cover any angulation problems.
: Only for multiple (Cannot be used for single implant)
: Only with screw-retained prosthetics.



➲ Components for Flat Abutment (Continued)

Flat Abutment

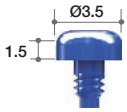
- Use Hand Driver (1.6 Hex)
- Recommend torque : 25Ncm

Profile Diameter	Cuff Height (mm)	Ref.C
Ø3.5	1	AANFAL3510
	2	AANFAL3520
	3	AANFAL3530
	4	AANFAL3540
	5	AANFAL3550

Flat Cover Screw

- Recommend torque : by hand (5 - 8Ncm)

Profile Diameter	Ref.C
Ø3.5	FCS3510



Flat Healing Abutment

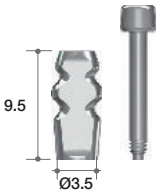
- Recommend torque : by hand (5 - 8Ncm)

Height(mm)	Ref.C
2	FHA402
3	FHA403
4	FHA404

Flat Impression Coping (Transfer)

- Guide Pin (FGPT) included.
- Should be tightened with Impression Driver (Page. 405)
- Special impression coping screw which can be used with a 1.2mm hex driver is available on request.

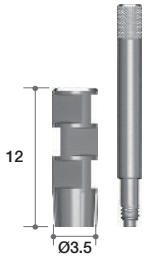
Profile Diameter	Height (mm)	Ref.C
Ø3.5	9.5	FIT4012T



Flat Impression Coping (Pick-Up)

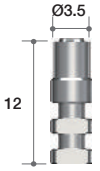
- Guide pin (FGPP15) included.

Profile Diameter	Height (mm)	Ref.C
Ø3.5	12	FIP4012T



Flat Lab Analog

Profile Diameter	Height (mm)	Ref.C
Ø3.5	12	FLA3512



Flat Temporary Cylinder

- Flat Cylinder Screw (FAS) included.

• Recommend torque : 15Ncm

Profile Diameter	Ref.C
Ø4.0	FTC4012T

Flat EZ Post Cylinder

- Flat Cylinder Screw (FAS) included.

• Recommend torque : 25Ncm

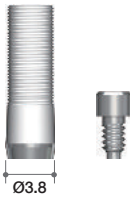
Height (mm)	Ref.C
5.5	FEC4005T
7.0	FEC4007T

Flat Gold Cylinder

- Flat Cylinder Screw (FAS) included.

• Useful to make a customized abutment in difficult situations.
• Precious and non-precious alloys.
• Melting point of gold alloy : 1063°C
• Threaded sleeves for convenient Resin / Wax-up.
• Recommend torque : 25Ncm

Profile Diameter	Ref.C
Ø3.8	FGC4012T

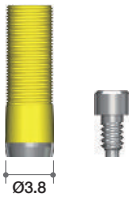


Flat CCM Cylinder

- Flat Cylinder Screw (FAS) included.

• Useful to make a customized abutment in difficult situations.
• Can be casted with non-precious alloys (Ni-Cr, Cr-Co alloys).
• Non-precious melting temperature : Depend on Manufacturer
• Threaded sleeves for convenient Resin / Wax-up.
• Melting temperature of CCM : 1300~1400°C
• Recommend torque : 25Ncm

Profile Diameter	Ref.C
Ø3.8	FCC4012T

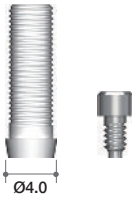


Flat Plastic Cylinder

- Flat Cylinder Screw (FAS) included.

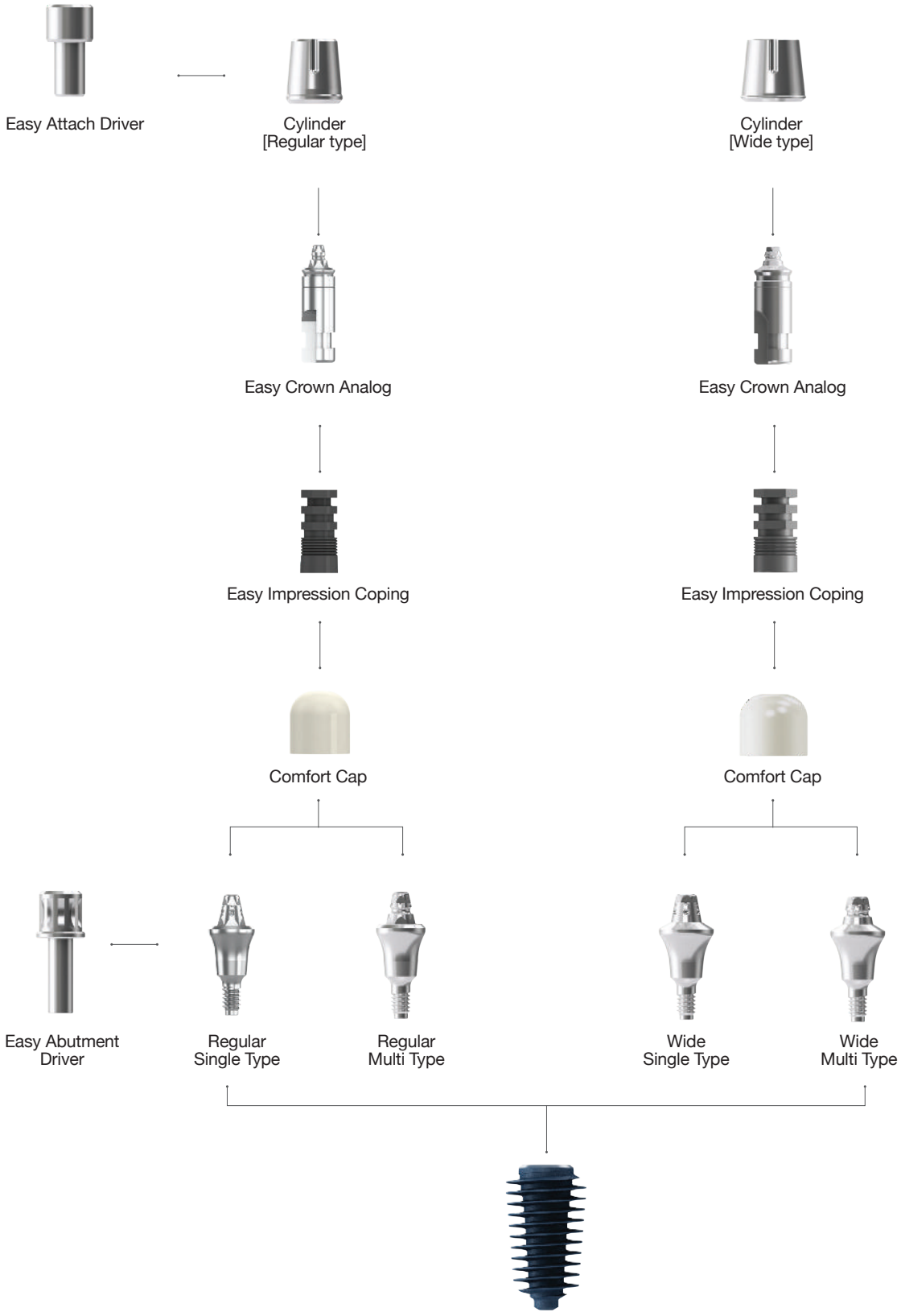
• Recommend torque : 25Ncm

Profile Diameter	Ref.C
Ø4.0	FPC4012T



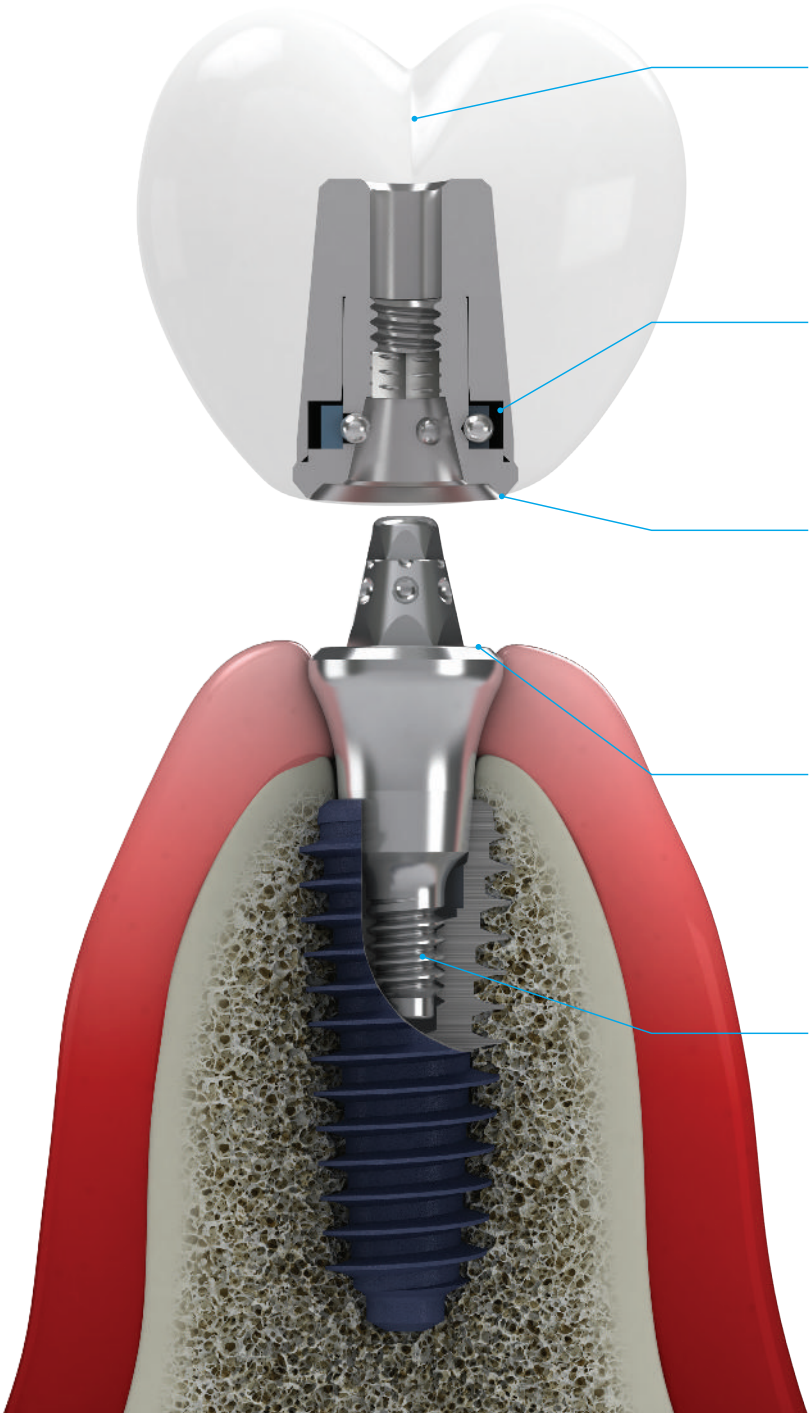
II. Abutment Level Prosthesis

5. EZ CROWN & Components



▸▸ EZ CROWN

Imagine perfect prosthetics that can last a life-time!



New concept for implant prosthetics

The EZ locking connection between the dimple of the abutment and the Zirconia ball-Nitinol spring of the cylinder creates a screw-less implant, facilitating an optimal occlusion & esthetic.

High retrievability

The EZ locking connection uses an elastic Nitinol spring & flexible abutment structure that can compensate up to 12.5 degrees, allowing the prosthesis to be retrieved.
This high retrievability enables convenient repair of the implant and effective treatment of any peri-implant inflammation.

No cement

As the EZ Crown abutment functions as a convertible abutment, this allows all the implant procedures to occur at the gingival level, including impression-taking, prosthesis fabrication, and aftercare. As a result, the entire management/maintenance process is improved.

New management & maintenance protocol

EZ Crown makes the entire management/maintenance process more effective for the clinician pain-free for the patient.

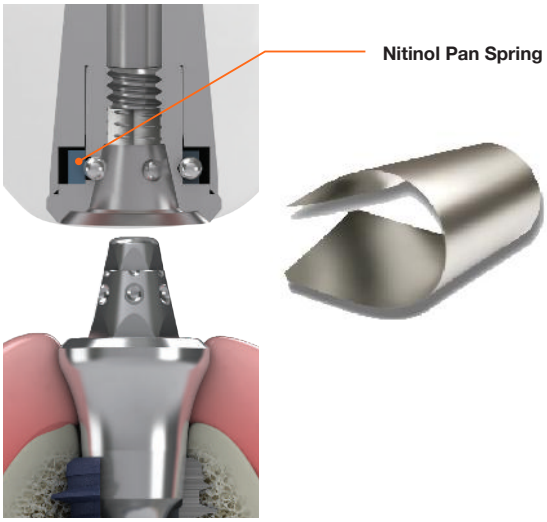
Less sinking, less loosening

The one-piece abutment is tightened into the fixture using a torque of 35N, which essentially eliminates the sinking problem inherent with an internal connection, while also safeguarding against screw loosening.

▸▸ EZ CROWN

Nitinol (shape memory alloy) pan spring provides long-term retentivity

Nitinol (nikel titanium alloy) is a shape memory alloy that is widely used in aerospace & medical technology. As dental implants need to be maintained for over 10 years, the special shape memory characteristic of Nitinol is applied to provide long-term retentivity of the dental prosthesis.



EZ Locking is more convenient for dental prosthetics

As shown in the table, EZ Crown is more flexible & convenient for all aspects of implant prosthetics.

	EZ CROWN	IN-EXT	CEMENT-RETAINED	SCREW-RETAINED	SCRP
Screw Hole	No	Yes	No	Yes	Yes
Cement removal	Easy	Difficult	Difficult	Easy	Easy
Aesthetics	Excellent	Poor	Excellent	Poor	Poor
Repair	Easy	Easy	Difficult	Easy	Easy
Connection Level	Gingiva	Gingiva	Fixture	Fixture	Fixture
LOAD	Low	Low	High	High	High
Screw Loosening	Low	Low	High	High	High
Retrievability	Very Easy	Easy	Difficult	Easy	Easy

Abutment-level impression only - no impression coping or scan abutment

Another benefit of EZ Crown is easy impression work, just a normal impression - no impression coping or scan abutment – so less effort & shorter chair-time.

Abutment Option

Abutment

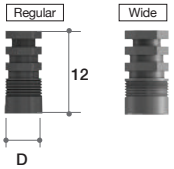
System	Profile Diameter	Cuff Height (mm)	Post Height (mm)	Ref.C Single	Ref.C Multi
AnyRidge	Regular (Ø 5.2)	1.0	3.8	SS52138AN	S52138AN
		2.0		S52138AN	S52238AN
		3.0		SS52238AN	S52338AN
		4.0		S52238AN	S52438AN
		5.0		SS52338AN	S52538AN
		1.0	5.0	S52338AN	S52150AN
		2.0		SS52438AN	S52250AN
		3.0		S52438AN	S52350AN
		4.0		SS52538AN	S52450AN
		5.0		S52538AN	S52550AN
		1.0	6.5	SS52150AN	S52165AN
		2.0		S52150AN	S52265AN
		3.0		SS52250AN	S52365AN
		4.0		S52250AN	S52465AN
		5.0		SS52350AN	S52565AN
	Wide Type (Ø 6.0)	1.0	3.8	SS60138AN	S60138AN
		2.0		SS60238AN	S60238AN
		3.0		SS60338AN	S60338AN
		4.0		SS60438AN	S60438AN
		5.0		SS60538AN	S60538AN
		1.0	5.0	SS60150AN	S60150AN
		2.0		SS60250AN	S60250AN
		3.0		SS60350AN	S60350AN
		4.0		SS60450AN	S60450AN
		5.0		SS60550AN	S60550AN

➲ Components for EZ CROWN

Impression Coping

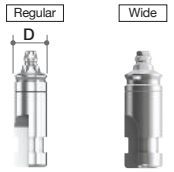
- Used for impression-taking on abutment level

Diameter	Type	Ref.C
Ø4.8	Regular	EIC
Ø5.5	Wide	EIC-W



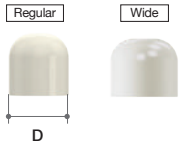
Easy Crown Analog

Diameter	Type	Ref.C
Ø4.5	Regular	ECL
Ø4.95	Wide	ECL-W



Comfort Cap

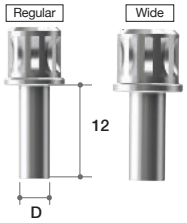
Diameter	Type	Ref.C
Ø5.0	Regular	ECH
Ø6.0	Wide	ECH-W



Easy Abutment Driver

- Used to connect the Abutment

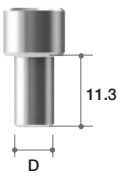
Diameter	Type	Ref.C
Ø4.0	Regular	EAD
Ø4.1	Wide	EAD-W



Easy Attach Driver

- Used to engage and place the cylinder

Diameter	Type	Ref.C
Ø6.5	Regular	EAAD
Ø7.9	Wide	EAAD-W



Easy Removal Driver

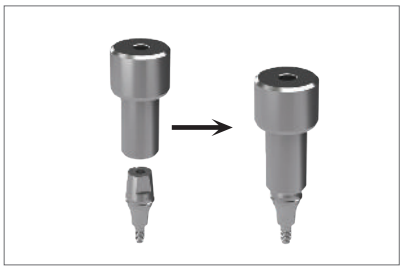
- Used for cylinder retrieval

Length(mm)	Ref.C
12	EARD

Instrument Set

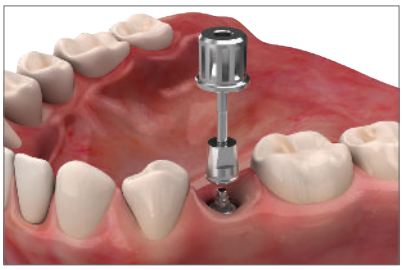
- Abutment Driver + Cylinder Driver + Retrieval Driver

▸▸ How to use EZ CROWN

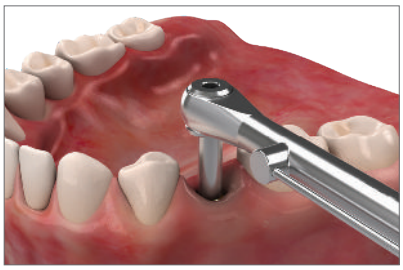


Connect Attach Driver to EZ Crown Abutment-Cylinder set

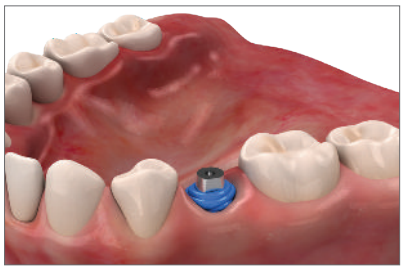
Connect the EZ Crown Abutment-Cylinder set to the fixture using Attach Driver'. (use hand)



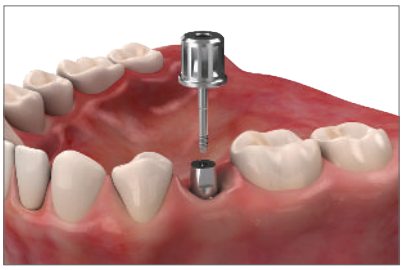
Remove the Cylinder from the EZ Crown Abutment using Remove Driver when tightened to some extent.



Tighten the EZ Crown Abutment to the fixture finally, using the torque wrench and Abutment Driver (35N)



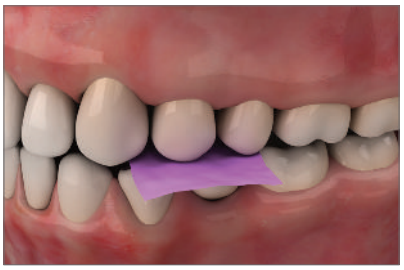
Re-connect the Cylinder to the EZ Crown Abutment and take an impression on cylinder level



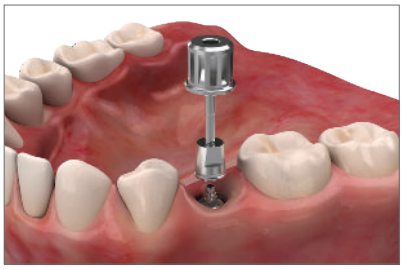
Remove the Cylinder" from the EZ Crown Abutment using Remove Driver

Connect Healing cap to the EZ Crown Abutment. Send Cylinder and the impression model to Dental Lab.

Final Crown and Cylinder

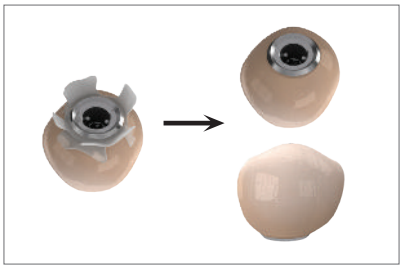


Re-tighten the Cylinder and Final Crown to the EZ Crown Abutment and then check the occlusion.



Remove the Cylinder" from the EZ Crown Abutment using "Remove Driver"

Cylinder and Final Crown cementation



Remove excess cement

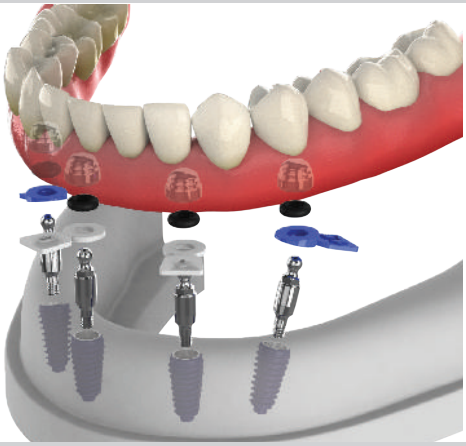
Final Prosthesis

III. Overdenture Prosthesis
1. MegaGen Overdenture System

Meg-Loc

**Compatible with products L & K,
excellent functionality, & incomparable price!**

Combination of Titanium housing and Pekkton (reinforced plastic) creates low water solubility and higher wear resistance and durability than other existing products.
Retention insert offers wide range of retention forces (600gf, 1200gf, 1800gf) to suit each patient, resulting in high level of satisfaction for both patient and dentist.
Strong physical properties of Pekkton and insert gap increase elasticity, so that insert does not tear or break unlike conventional nylon products, thereby ensuring strong retention and longer life.



Meg-Ball

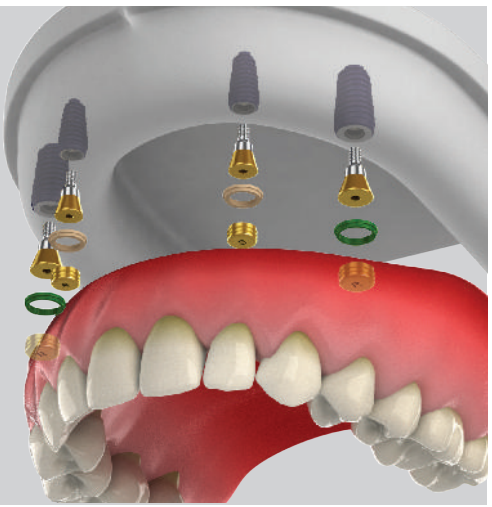
**Smallest housing, retentive ring with longer life!
Even when the implant angle is not parallel, a stable denture can still be produced!**

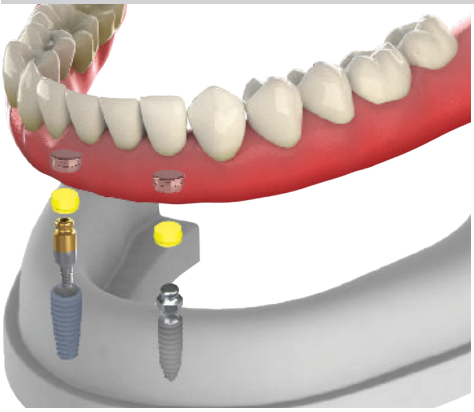
Compatible with other products with Ø2.25 head size, minimized patient inconvenience due to small-size housing, simpler to arrange artificial teeth as space occupied by denture is reduced, and easier to maintain than other systems.
Retentive ring has a high elasticity, abrasion resistance, and durability, thereby doubling the length of life when compared to a silicone O-ring and guaranteeing a longer life than NBR products.
Positioner (0/5/10/15 degrees) maintains parallel housing direction, even with distorted implant placement angle, ensuring denture stability.

Meg-Magnet

**Designed to maintain stable & sufficient magnetic force!
Completely blocks bursts & corrosion resistant!**

Structure is connected with abutment using magnetic force, which is feasible even with insufficient bone volume or poor bone quality
Easy to attach and detach, and minimal inflammation.
Magnet of Ø4.5 & Ø5.0 is compatible with other products, and laser marking on upper part makes it easy to distinguish between up and down.
Sufficient magnetic force ensures stable retention
Laser sealing blocks any bursting phenomenon.
TiN coating provides corrosion resistance.
Positioner (small & regular) prevents magnet from slipping in the mouth and stops any flow of impression materials under the abutment.





Meg-Rhein

Can compensate for tilted implant placement angle up to 50°

Combined head and housing structure is smallest on the market.

Retentive cap is based on Italian technology and has uniform physical properties. Various retention forces (600gf, 1200gf, 1800gf, 2700gf) classified by color can be selected according to each patient.

Dynamic housing with double structure enables tilting to 25 ° angle, allowing stable denture even when with distorted implant placement angle.

III. Overdenture Prosthesis

2. Meg-Loc Abutment & Component

Meg-Loc Metal Housing set

Block-out Spacer

Meg-Loc Abutment

▸▸ Meg-Loc Overdenture System

Advantages

Better abrasion resistance and durability

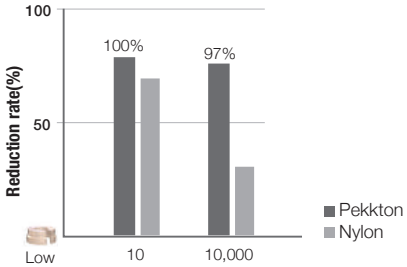
Combination of Titanium housing and reinforced plastic (Pekkton) provides low water solubility and high resistance, making it superior in abrasion resistance and durability compared to existing products.

Water Sorption Test

Property	Meg-Loc (Pekkton)	Product L	Unit
Water Sorption	8.7	93.5	μg/mm³

Stronger retention and longer life

Strong physical properties of Pekkton and gap in insert increase the elasticity, preventing the insert from being torn or broken unlike existing nylon products, even when angle does not match when attaching & removing denture.



Easy to use

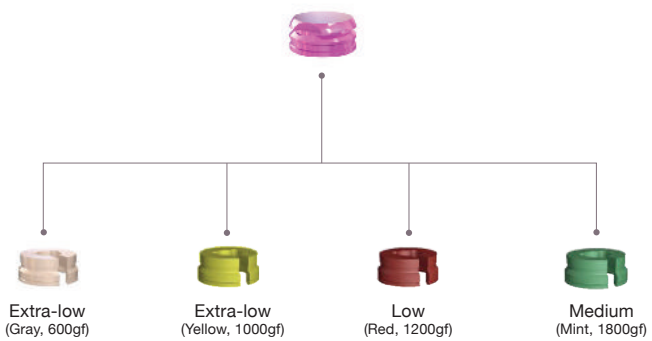
High resistance to plaque and easy cleaning
Easy replacement of retention insert

Easy compatibility

Compatible with Product L and Product K (same specifications)

Tilting Angle

Various Retentive Caps of the Meg-Loc



Meg-Loc Overdenture System

Meg-Loc Abutment

-Angle compensation to one side 20 °
(both sides 40 °)
- Gently rounded shape
- Compatible with 1.2 Hex Driver
• Recommend torque : 35Ncm

Cuff Height (mm)	Ref.C
0	MLAR00
1.0	MLAR01
2.0	MLAR02
3.0	MLAR03
4.0	MLAR04
5.0	MLAR05
6.0	MLAR06
7.0	MLAR07

Meg-Loc Package

- 1 Meg-Loc Abutment

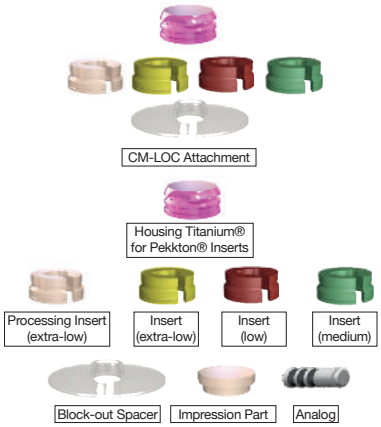
* Following package items are delivered with San DreMetto Korea packaging.

- 1 Titanium Housing
- 1 Block Out Spacer
- 4 Pekkton Retention Inserts
(Gray-600gf(for lab), Yellow-1000gf, Red-1200gf, Mint-1800gf)

Cuff Height (mm)	Ref.C
0	MLAR00P
1.0	MLAR01P
2.0	MLAR02P
3.0	MLAR03P
4.0	MLAR04P
5.0	MLAR05P
6.0	MLAR06P
7.0	MLAR07P

Meg-Loc Attachment

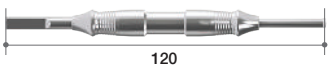
Description	QTY	Ref.C
CM-LOC Attachment	SET	CM-LOC
Housing Titanium® for Pekkton® Inserts	4EA	CM-LOC-TP
Processing Insert (extra-low)	4EA	CM-LOC-PI
Insert (extra-low)	4EA	CM-LOC-EL
Insert (low)	4EA	CM-LOC-L
Insert (medium)	4EA	CM-LOC-M
Block-out Spacer	4EA	CM-LOC-BS
Impression Part	4EA	CM-LOC-IP
Analog	4EA	CM-LOC-AN



Multi Tool

- Retention Insert Insertion & Removal Tool

Ref.C
MLMT



III. Overdenture Prosthesis

3. Meg-Ball Abutment & Components

Meg-Ball Metal Housing set

Housing Positioner
(0°/5°/10°/15°)

Meg-Ball Abutment

▸▸ Meg-Ball Overdenture System

Advantages

Easy compatibility

Ø2.25 head size for easy compatibility with other products

Smallest Housing

Metal Housing

Small housing minimizes patient inconvenience, facilitates arrangement of artificial teeth by reducing space occupied by denture, and is easier to maintain than other systems.

Double length of life

Retentive Ring

High elasticity, abrasion resistance, and durability doubles the length of life when compared with silicone O-ring and guarantees longer life than NBR products.

Stable denture even when implant placement angle is distorted

Positioner (0/5/10/15 degrees) maintains parallel housing direction even when angle of implant placement is distorted, ensuring denture stability

0° 5° 10° 15°

Tilting Angle

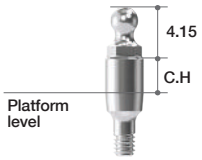
Meg-Ball Overdenture System

Meg-Ball Abutment

- Angle compensation to one side 15 °
  (both sides 30 °)
- Ø2.25 Ball shape

• Recommend torque : 35Ncm

Cuff Height (mm)	Ref.C
0	MBAR00
1.0	MBAR10
2.0	MBAR20
3.0	MBAR30
4.0	MBAR40
5.0	MBAR50
6.0	MBAR60
7.0	MBAR70



Meg-Ball Package

- 1 Meg-Ball Abutment
- 1 Metal Housing Set
- 4 Housing Positioner (0°/ 5°/ 10°/ 15°)

Cuff Height (mm)	Ref.C
0	MBAR00P
1.0	MBAR10P
2.0	MBAR20P
3.0	MBAR30P
4.0	MBAR40P
5.0	MBAR50P
6.0	MBAR60P
7.0	MBAR70P

Meg-Ball Metal Housing Set

- 1 Metal Housing
- 1 Retentive Ring

Ref.C
MBHR

Retentive Ring Set

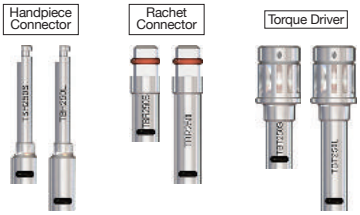
- MBR5 = 5ea
- MBR10 = 10ea

Quantity	Ref.C
5	MBR5
10	MBR10

Ball Driver

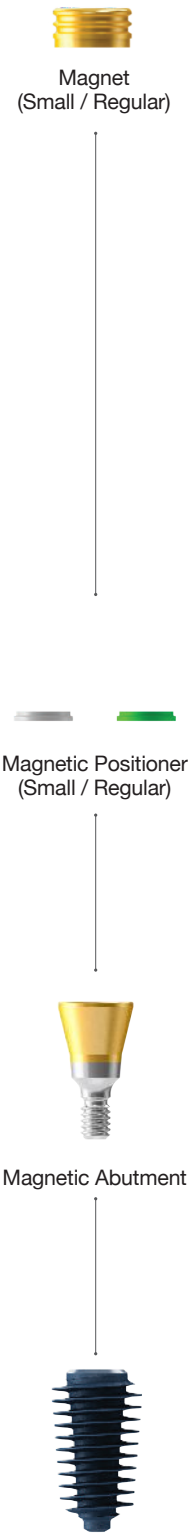
- For seating of the Ball Abutment into the fixture.
- Can connect to a Handpiece, Ratchet or Torque Wrench.
- Available in long and short.
- Refer to Page. 394

Type	Ref.c
Toque Driver(Short)	TBT250S
Toque Driver(Long)	TBT250L



III. Overdenture Prosthesis

4. Meg-Magnet Abutment & Components



▸▸ Meg-Magnet Overdenture System

Advantages

Easy to apply for elderly patients or disabled patients

Applicable with insufficient bone volume and poor bone quality
Easy to attach and detach
Unlikely to cause inflammation

Designed for maximum magnetic efficiency and durability

Sufficient magnetic force (450gf, 650gf) to ensure stable retention
Laser sealing blocks any bursting phenomenon

Outstanding retention
- Blocks bursting
- Corrosion resistant
- Abrasion resistant

TiN coating provides corrosion resistance
Over 0.1mm thickness at contact with attachment to ensure wear resistance

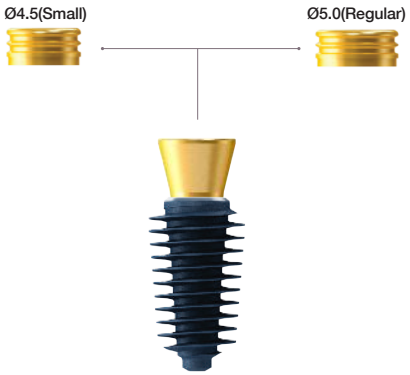
Easy to distinguish between up and down via laser marking on upper section

Magnet of Ø4.5 & Ø5.0 is compatible with other products
Laser marking on upper part makes it easy to distinguish between up and down

No slippage of magnet

Positioner (small & regular) prevents magnet from slipping in mouth and stops any flow of impression materials under the abutment

Component of the Meg-Magnet

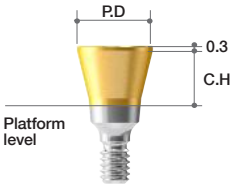


Meg-Magnet Overdenture System

Meg-Magnet Abutment

- Use to 1.2 Hex Driver
- Recommend torque : 35Ncm

Profile Diameter	Cuff Height (mm)	Ref.C
Ø4.5	0	MMAR400
	1.0	MMAR410
	2.0	MMAR420
	3.0	MMAR430
	4.0	MMAR440
	5.0	MMAR450
	6.0	MMAR460
	7.0	MMAR470
Ø5.0	0	MMAR500
	1.0	MMAR510
	2.0	MMAR520
	3.0	MMAR530
	4.0	MMAR540
	5.0	MMAR550
	6.0	MMAR560
	7.0	MMAR570



Meg-Magnet Package

- 1 Meg-Magnet Abutment
- 1 Magnet (Ø4.5-S, Ø5.0-R)
- 1 Magnetic Positioner

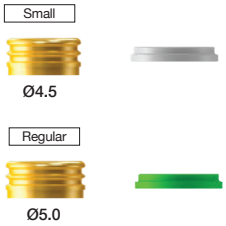
***Caution!**
[Magnetic Positioner]
- Use according to the standard
  : Small(White)/ Regular(Green)
  -Do not reuse

[Magnet]
- Do not heat above 70℃
  : Loss of magnetism at high temperatures
  : If sterilization is required, alcohol disinfection is recommended, not autoclave
- Remove if taking MRI.
- No direct contact between products during the procedure
  : Difficulty in separation due to attraction between magnets

Profile Diameter	Cuff Height (mm)	Ref.C
Ø4.5	0	MMAR400P
	1.0	MMAR410P
	2.0	MMAR420P
	3.0	MMAR430P
	4.0	MMAR440P
	5.0	MMAR450P
	6.0	MMAR460P
	7.0	MMAR470P
Ø5.0	0	MMAR500P
	1.0	MMAR510P
	2.0	MMAR520P
	3.0	MMAR530P
	4.0	MMAR540P
	5.0	MMAR550P
	6.0	MMAR560P
	7.0	MMAR570P

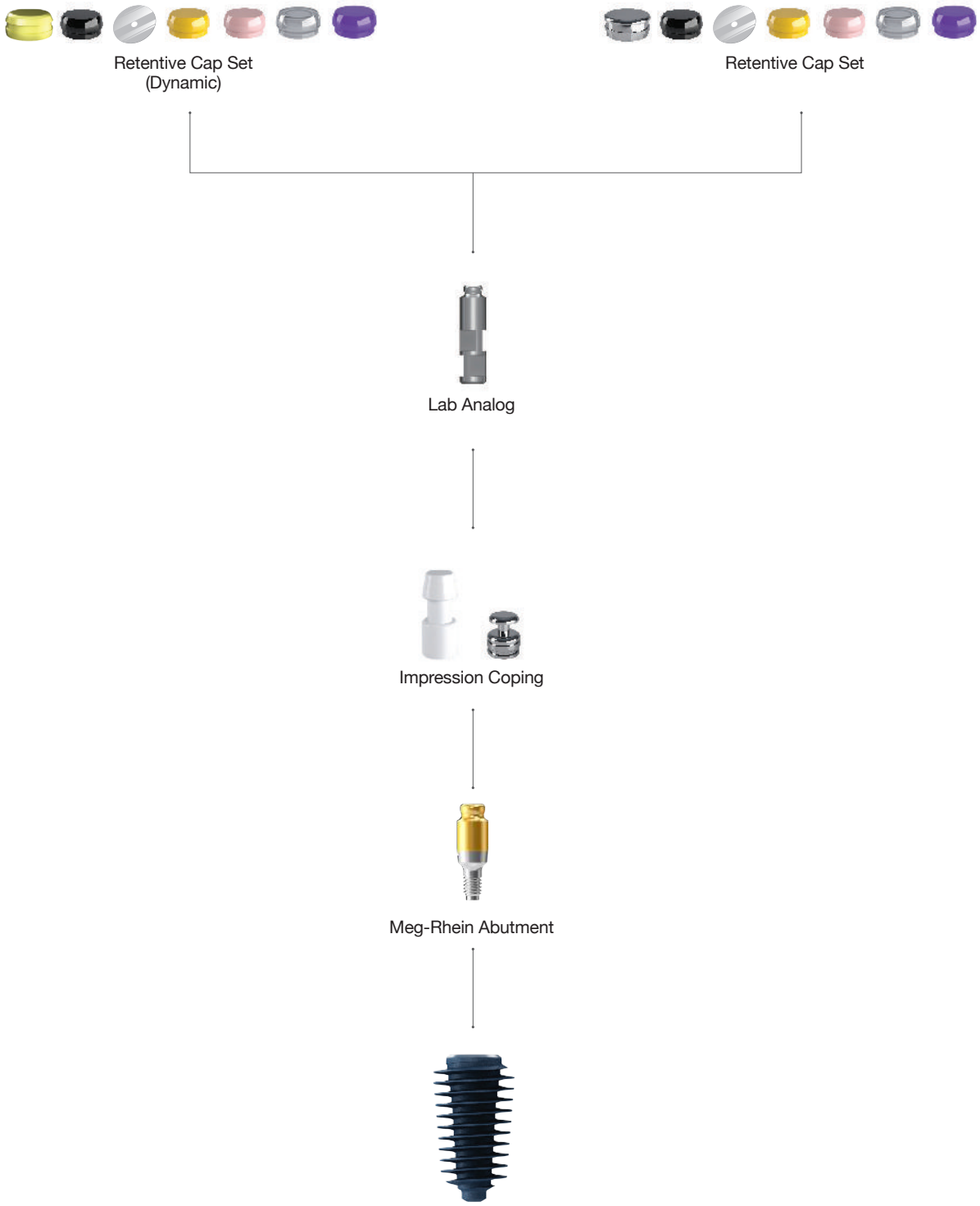
Meg-Magnet Attachment Set

Size	Ref.C
Small	MA402
Regular	MA502



III. Overdenture Prosthesis

5. Meg-Rhein Abutment & Components



➲ Meg-Rhein Overdenture System

Meg-Rhein Overdenture System

(Dynamic)

- 1 Meg-Rhein Abutment
- 1 Plastic Impression Coping
- 1 Stainless Steel Housing (Dynamic) & Black-Lab
- 1 Protective Disk
- 4 Retentive Caps (Yellow-0.6kgf, Pink-1.2kgf, White-1.8kgf, Violet-2.7kgf)

• Perfect compatibility with the Rhein83 from Italy.
• Recommend torque : 35Ncm.

Cuff Height (mm)	Ref.C
0	ADR00PA
1.0	ADR01PA
2.0	ADR02PA
3.0	ADR03PA
4.0	ADR04PA
5.0	ADR05PA
6.0	ADR06PA

Meg-Rhein Overdenture System

- 1 Meg-Rhein Abutment
- 1 Plastic Impression Coping
- 1 Stainless Steel Housing
- 1 Protective Disk
- 5 Retentive Caps (Black-Lab, Yellow-0.6kgf, Pink-1.2kgf, White-1.8kgf, Violet-2.7kgf)

• Perfect compatibility with the Rhein83 from Italy.
• Recommend torque : 35Ncm.

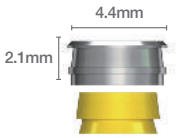
Cuff Height (mm)	Ref.C
0	ADR00P
1.0	ADR01P
2.0	ADR02P
3.0	ADR03P
4.0	ADR04P
5.0	ADR05P
6.0	ADR06P

▸▸ Overdenture System

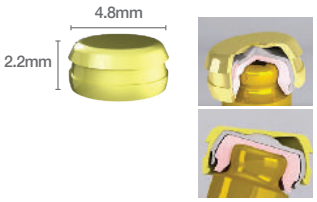
Advantages

Small & Easy-to-Use Housing System

Normal



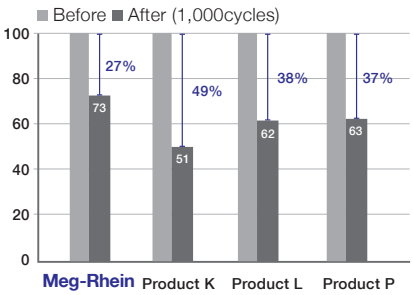
Dynamic

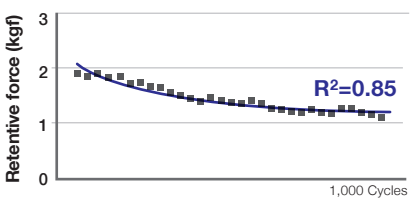


Tilting Angle

Various Retentive Caps of the Meg-Rhein

Low Reduction Rate & Uniform Variance of Retentive Force





R^2(Coefficient of determination) becomes more reliable when it is close to "1".

➲ Components for Meg-Rhein Abutment (Continued)

Stainless Steel Housing

- 5ea/pack

Ref.C
MHP

Stainless Steel Housing (Dynamic)

- 5ea/pack

Ref.C
THP

Retentive Caps (White)

- White cap(1.8kgf) - For refill (5ea/pack).
- Can be used for more retentive force following pink cap(1.2kgf).

Ref.C
RCWP

Retentive Caps (Violet)

- Violet cap(2.7kgf) - For refill (5ea/pack).
- Can be used for more retentive force following white cap(1.8kgf).

Ref.C
RCVP

Retentive Caps (Pink)

- Pink cap(1.2kgf) - For refill (5ea/pack).

Ref.C
RCPP

Retentive Caps (Yellow)

- Yellow cap(0.6kgf) - For refill (5ea/pack).

Ref.C
RCYP

Retentive Caps (Black)

- For laboratory

Ref.C
RCBP

➲ Components for Meg-Rhein Abutment

Stainless Impression Coping (Pick-Up)

- 2ea/pack.
- Italy - Rhein 83 products.
- For accurate (pick-up type) impression.
- Metal with groove design to prevent from swaying.

Ref.C
044CAIN

Lab Analog

Ref.C
PLA

Caps and Clips Extractor tool

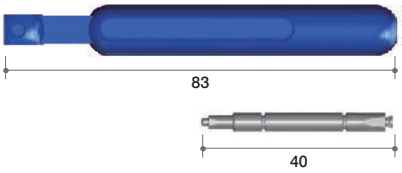
- Retentive Cap removal tool.

Ref.C
491EC

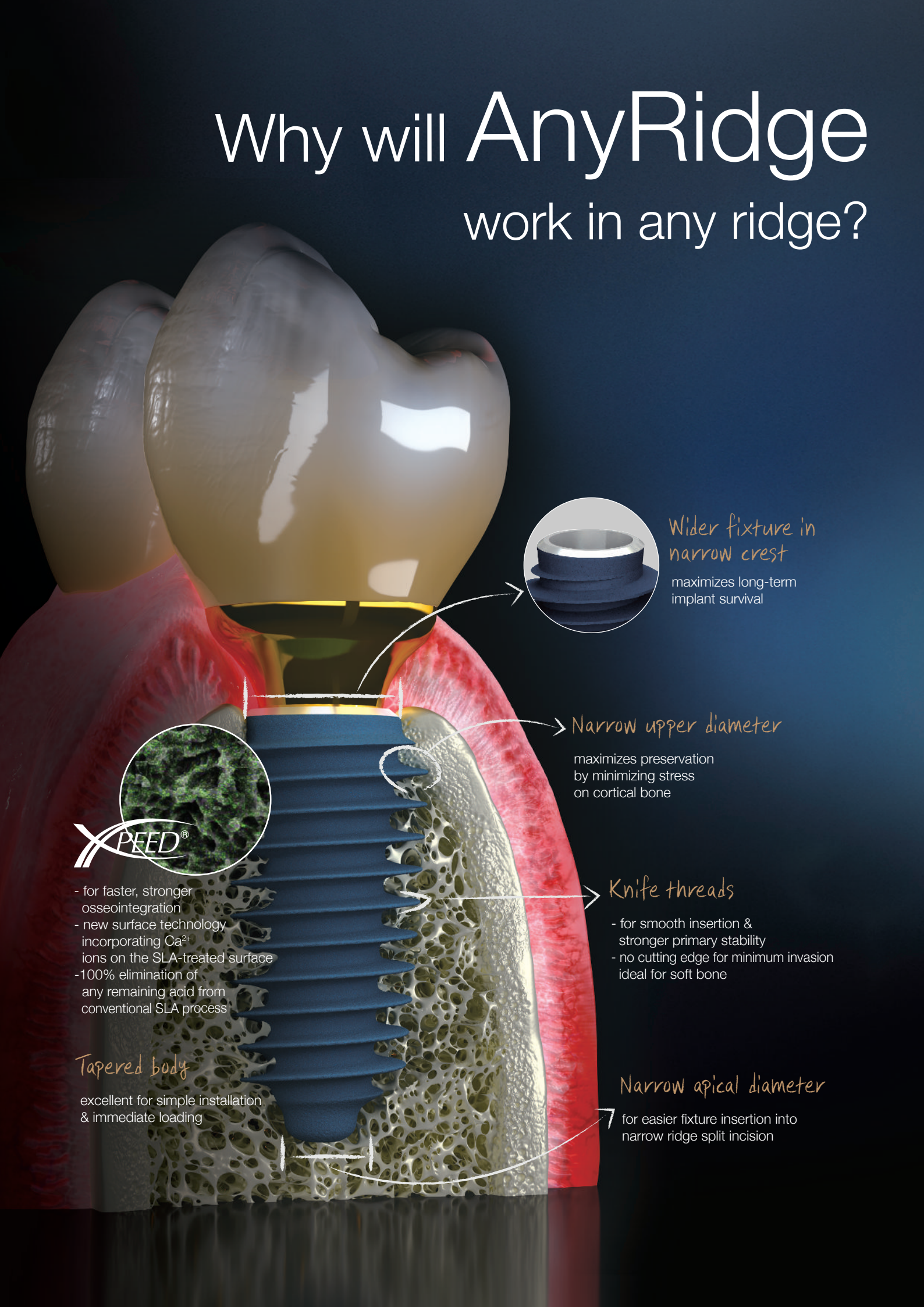
Retentive Cap Insertion Tool

- Retentive Cap insertion tool.

Ref.C
085IAC



Why will AnyRidge work in any ridge?



Wider fixture in narrow crest

maximizes long-term implant survival

Narrow upper diameter

maximizes preservation by minimizing stress on cortical bone

Knife threads

- for smooth insertion & stronger primary stability
- no cutting edge for minimum invasion ideal for soft bone

Narrow apical diameter

for easier fixture insertion into narrow ridge split incision

XPEED®

- for faster, stronger osseointegration
- new surface technology incorporating Ca^{2+} ions on the SLA-treated surface
- 100% elimination of any remaining acid from conventional SLA process

Tapered body

excellent for simple installation & immediate loading

AnyRidge Clinical Case

➲ Clinical Case 1

- Courtesy of Dr. Kwang-Bum Park

AnyRidge implant has excellent surface treatment which can be osseointegrated at this extreme case of bone defect.

Fig 1. This patient was 56 years old male patient and had a chief complaint of chewing difficulty on the left first mandibular molar due to periodontitis. On the panoramic radiograph, the tooth was floated with complete bone loss to the apex, and there was not enough bone to get initial stability for implant placement at the apex above mandibular nerve. So I decided to extract the tooth and wait for 4 months for regeneration of the socket.

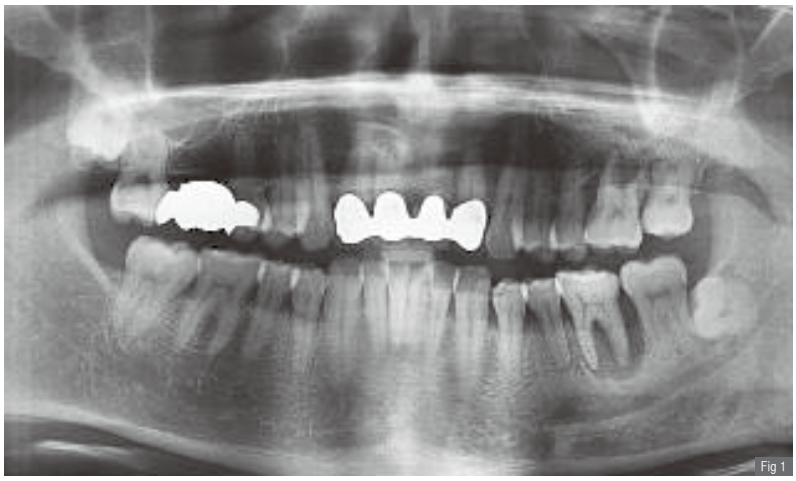


Fig 2. The patient came back to my office after 4 months. Healing appeared good enough clinically, but the panoramic view still showed large socket defect. In many cases like this, we can expect some amount of bone filled in the socket which can allow minimal initial stability for implant placement.

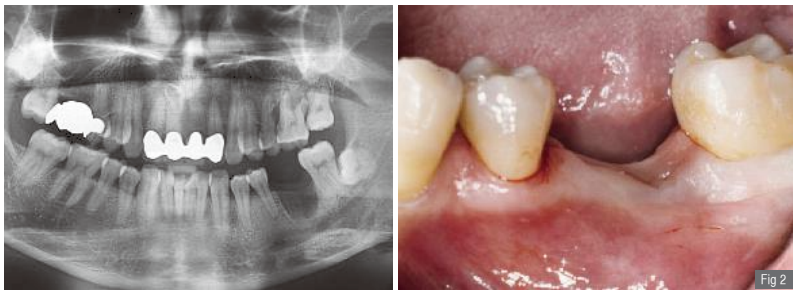


Fig 3. When the flap was opened, I was very embarrassed that bone regeneration did not occur in the socket. None of remaining bone could be used for implant fixation.

Fig 4. A widest AnyRidge implant 8.0mm was placed on the mesial wall of extraction socket, but there was no initial stability. This trial was quite heroic treatment, but there was no other option except this because he spent many hours for this surgery.

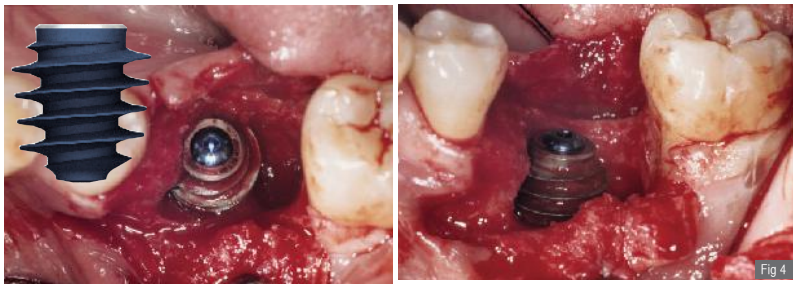


Fig 5. The mixture of Allograft (Mega-Oss) and Synthetic bone (Bone Plus) was placed into the remaining socket defect and a collagen membrane was covered. Then primary closure was made with incision releasement on the periosteum.

Fig 6. On the panoramic view after surgery, we could find that none of the fixture was engaged with remaining bone, so it had more than 1.6mm gap from the tip to the depth of knife threads. I worried about the bone filling and success of the osseointegration on this fixture.

Fig 7. However, I was surprised with the hard cortical bone regeneration over the cover screw when I did the second stage surgery with the Biolaser.

Fig 8. On the intraoral radiograph taken several weeks after second surgery, we could see the fully regenerated bone into the bottom of thread depth.

Fig 9. The patient came back to our office to get one more implant on the maxillary upper molar after 2 years from the first implant surgery. The regenerated bone was matured and showed very stable crestal bone on the intraoral radiograph.

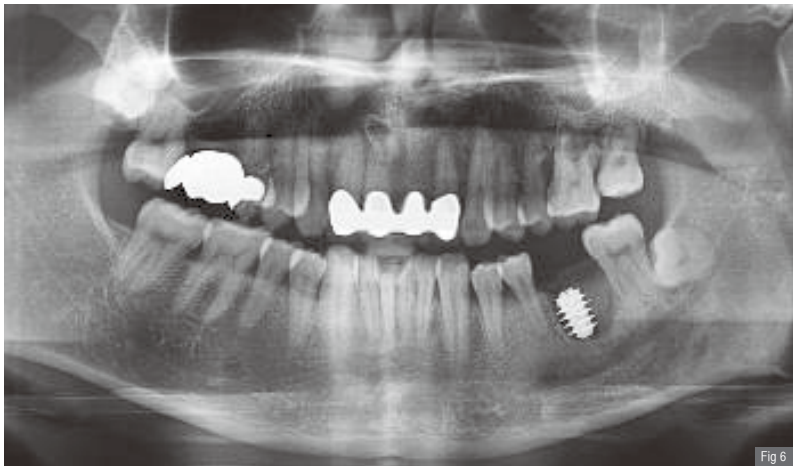


Fig 6


Fig 7

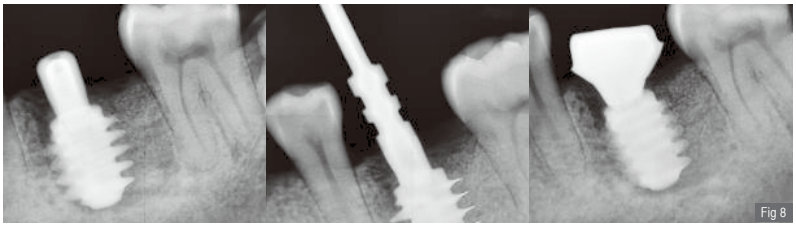


Fig 8

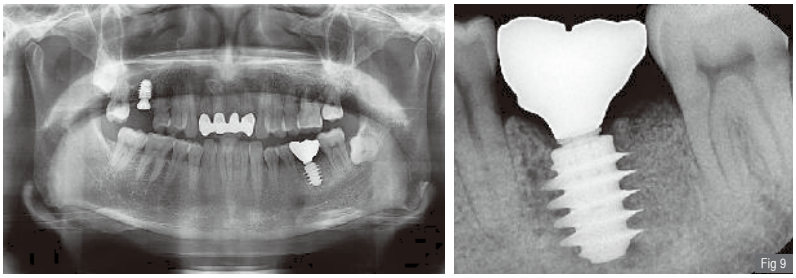


Fig 9

Clinical Case 2

- Courtesy of Dr. Kwang-Bum Park

Advantage of fuse abutment with AnyRidge implant for immediate loading in upper fully edentulous case

Fig 1. An 80-year-old female patient presented with discomfort related to her upper teeth. About 10 years previously she underwent implant surgery in the mandible and received temporary teeth immediately as the bone density was sufficient for immediate loading. The patient requested a treatment plan for the upper arch that would give her immediate teeth.

Fig 2. Clinical photos before surgery. The patient had no discomfort or complaints related to her mandibular implants. Plus her hygiene control was very good for maintaining healthy peri-implant tissue.

Fig 3. All the remaining teeth were extracted. As shown, some teeth had severe periodontitis and some had decay at the cervix of the tooth. Drilling up to 2.9 mm was conducted at each implant site and eight 3.5×15mm implant fixtures were placed using a minimal flap design. All the fixtures showed excellent initial fixation, and the immediately-placed implants only had small socket defects.

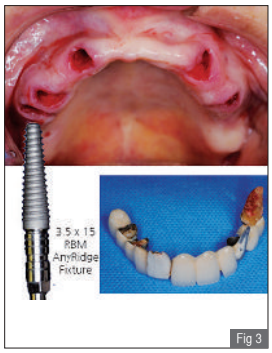


Fig 4. Eight fuse abutments were connected and the flaps were sutured to create a tight sealing against the fuse abutments

Fig 5. The fuse abutments were prepared using a high speed handpiece for a temporary bridge that was already made before the implant surgery

Fig 6. Panoramic scan taken immediately after surgery. The first premolar implant showed some mis-fit between the crown and the ratio.

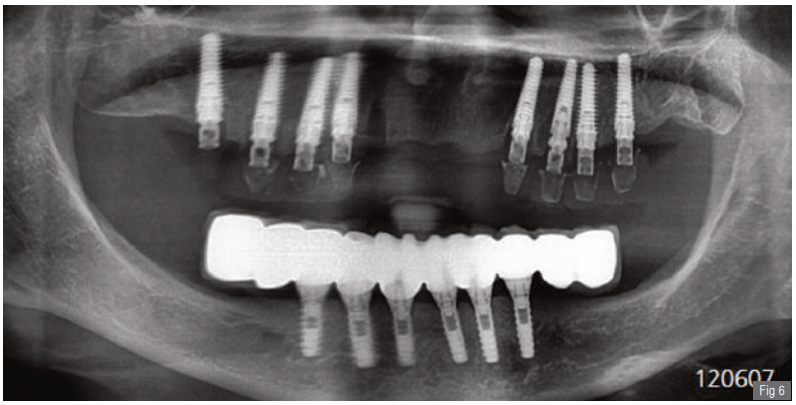
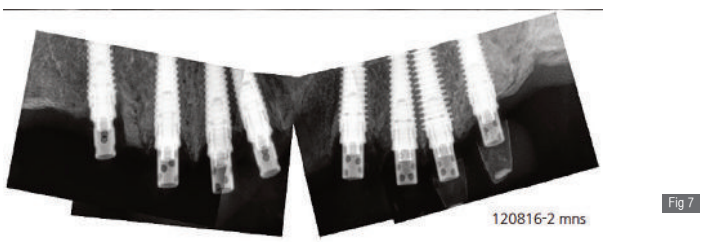


Fig 7. Intraoral scans taken 2 months after surgery. Shadows of the extraction socket can still be seen, but regenerated bone has started to fill the socket defects. The fuse abutments are functioning well without any problem.
An impression was taken for customized zirconia abutments



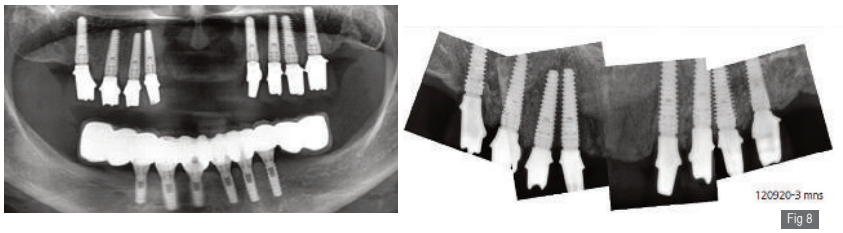


Fig 8

Fig 8. Panoramic & intraoral scans taken 3 months after surgery. Zirconia customized abutments were connected to each fixture. The socket defects are completely filled with regenerated bone even in the case of immediate loading on the immediately placed implants.


Fig 9

Fig 9. Clinical photos of zirconia customized abutments and PMMA temporary bridge made using CAD/CAM technique. A zirconia abutment is excellent for both esthetics and hygiene maintenance. It has less than 1/10 bacterial accumulation on the surface compared with metals including titanium. PMMA provisional bridge is stronger than tooth resin, especially at the margin, so much beneficial for functional and occlusal tests.


Fig 10

Fig 10. A full zirconia one-piece bridge was made and delivered. The patient was very satisfied with the results, and thankful that she was provided with 'teeth' from the beginning to the end.

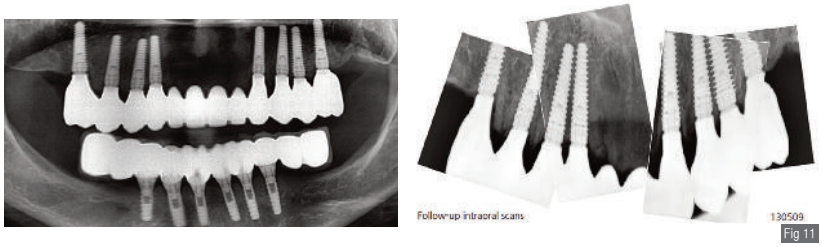


Fig 11

Fig 11. Panoramic scan of final restorations on day of delivery

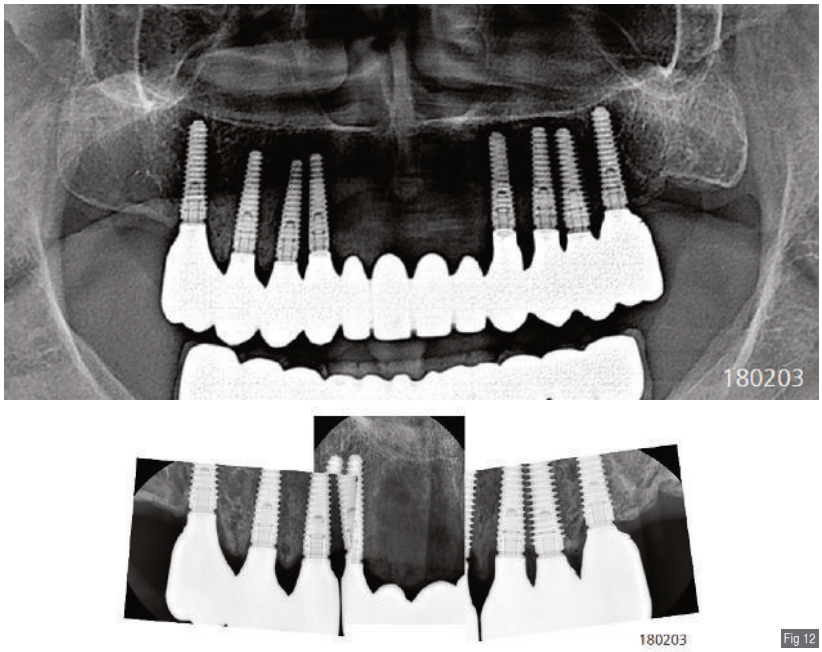


Fig 12

Fig 12. Panoramic scans at 7 years follow-up

Clinical Case 3

- Courtesy of Dr. Soheil Bechara

Simultanious sinus lift and implant placement

Fig 1. The patient presented with huge bony defects around residual roots in the upper jaw. The treatment plan was to perform immediate implant placement and extract all decayed roots during one surgical session, as the patient had only one week to stay in the country.

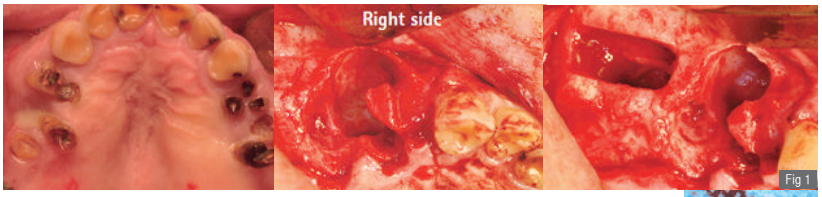
Fig 2. Lateral window sinus lifting was performed on the right side with simultaneous implant placement in tooth area 17. In area 14 we can observe a huge bony defect which was thoroughly debrided until the margins of healthy bone. The Osteotomy was prepared with a 2mm final drill to place a 3.5x15mm Anyridge implant.

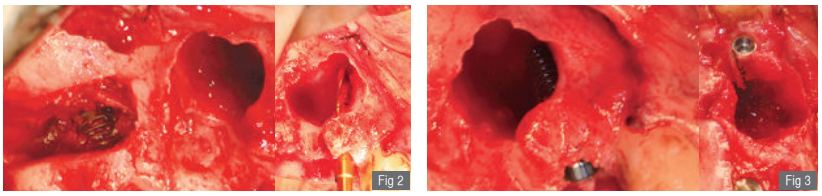
Fig 3. 3.5x15mm Anyridge implant was placed having only 2mm contact with the bone in the coronal part achieving 25 Ncm of initial torque.

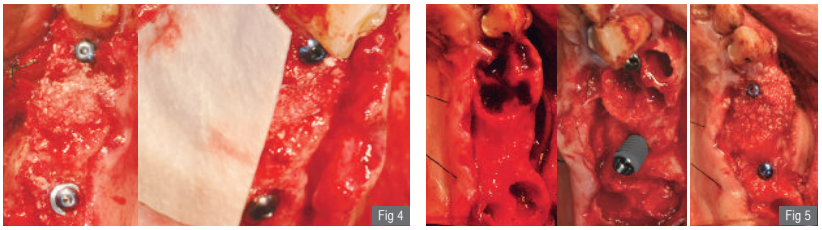
Fig 4. The bony defect was filled with a Xenograft and covered with a collagen membrane. Although the defect is huge but it is still considered as an intra-bony defect with a good potential of bone regeneration.

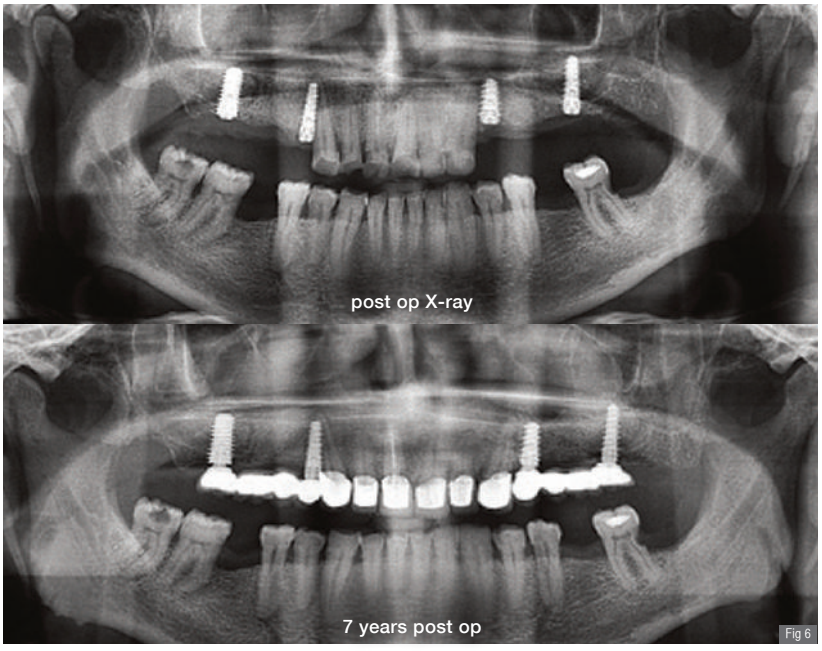
Fig 5. On the left side two Anyridge implants were placed, immediate implant placement in area 24. Sinus lift with simultaneous implant placement in area 27.

Fig 6. No marginal bone loss, successful aesthetic and functional outcome.









Clinical Case 4

- Courtesy of Prof. Giuseppe Luongo

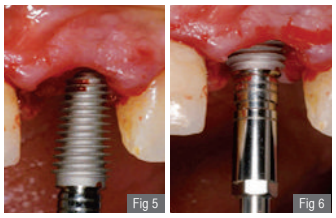
Immediate post-extraction insertion of implant and immediate loading.

Before Surgery

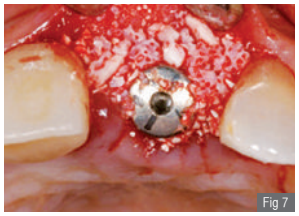
Fracture of #21 tooth. Good stability of the hard and soft tissues suggests immediate post-extraction insertion of implant and immediate loading.

Surgery

To protect the esthetic outcome of the procedure, the implant site was prepared via slightly palatal alveolar access.



A 4.5×11mm Anyridge was placed in the prepared site.



Biomaterial was added to the vestibular aspect to improve the stability of the esthetic outcome.

Temporary Prosthesis

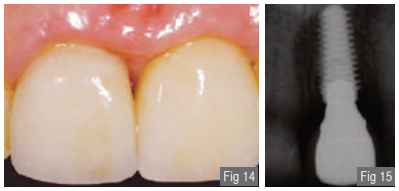
A temporary crown was immediately placed.

12 Weeks after surgery

Tissue was ready to proceed with final abutment and crown.

Final Prosthesis

The implant position was in harmony with the surrounding tissue and a prosthodontist completed the case using a zirconia framework.



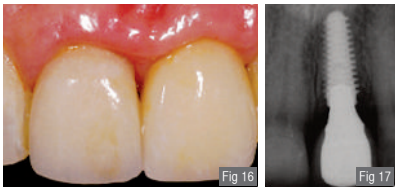


Fig 1. Clinical photos.

Fig 2. Intraoral scan.

Fig 3, 4. Clinical photos of 1st surgery.

Fig 5, 6. Clinical photos of implant positioning.

Fig 7, 8. Clinical photo & scan of surgery.

Fig 9, 10. Clinical photos of immediate temporary crown in place.

Fig 11, 12. Clinical photos of healing and final abutment in place.

Fig 13. Clinical photo of zirconia framework in place.

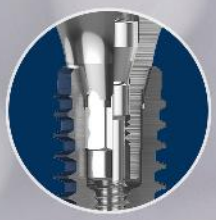
Fig 14, 15. Clinical photo & intraoral scan of final crown at time of placement.

Fig 16, 17. Clinical photo & intraoral scan of final crown at 1-yr follow-up.

Fig 18, 19. Clinical photo & intraoral scan of final crown at 5-yr follow-up.

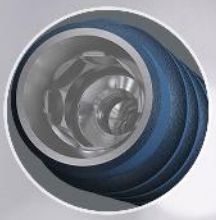
Blue [blu]: a masterpiece of implant technology

BLUEDIAMOND IMPLANT



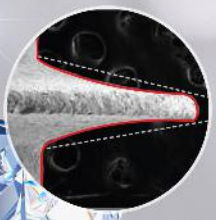
Fracture stress-free

- Use desired fixture size, even with limited alveolar bone width & no bone graft
- Diminishes stress that causes fractures



X-FIT ™! Feel the perfect connection / reduce chairtime

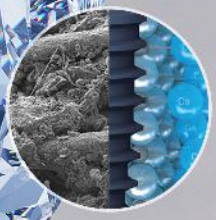
- Double-bonded connection ensures more accurate & safe connection
- Avoid all misconnections!
- Structure prevents screw loosening, reducing maintenance time



High initial stability for immediate placement in all bone types

KnifeThread® guarantees sustained implant stability

- Excellent BIC
- Special cutting efficiency during implant placement
- High resistance to compressive force
- Minimizes occurrence of shear force
- Large surface area for osseointegration



XPEED®
- superior surface technology to S-L-A

Nano bone matrix layer of Ca^{2+} incorporated in S-L-A surface

Excellent, rapid, & long-lasting osseointegration (unique BLUE surface)

- Same surface treatment of AnyRidge - recipient of Clean Implant Trusted Quality Award for 7 consecutive years
- >50% reduction of hydrocarbons for better osseointegration
- 2 times better adsorption of essential proteins for osseointegration
- >20% improved osteoblast proliferation

Minimizes Marginal Bone Resorption

Thread-less design below platform minimizes stress on cortical bone for improved long-term stability of marginal bone & esthetics.

A CUT ABOVE THE REST

BLUE DIAMOND IMPLANT